LATTICE 2015

KOBE

XXXIII International Symposium on Lattice Field Theory

July 14–18, 2015

Kobe International Conference Center, Kobe, Japan

Contents

1 Sponsors

Center for Computational Sciences, University of Tsukuba

Joint Institute for Computational Fundamental Science

Kobayashi-Maskawa Institute for the Origin of Particles and the Universe, Nagoya University

RIKEN Advanced Institute for Computational Science

Cray Inc.

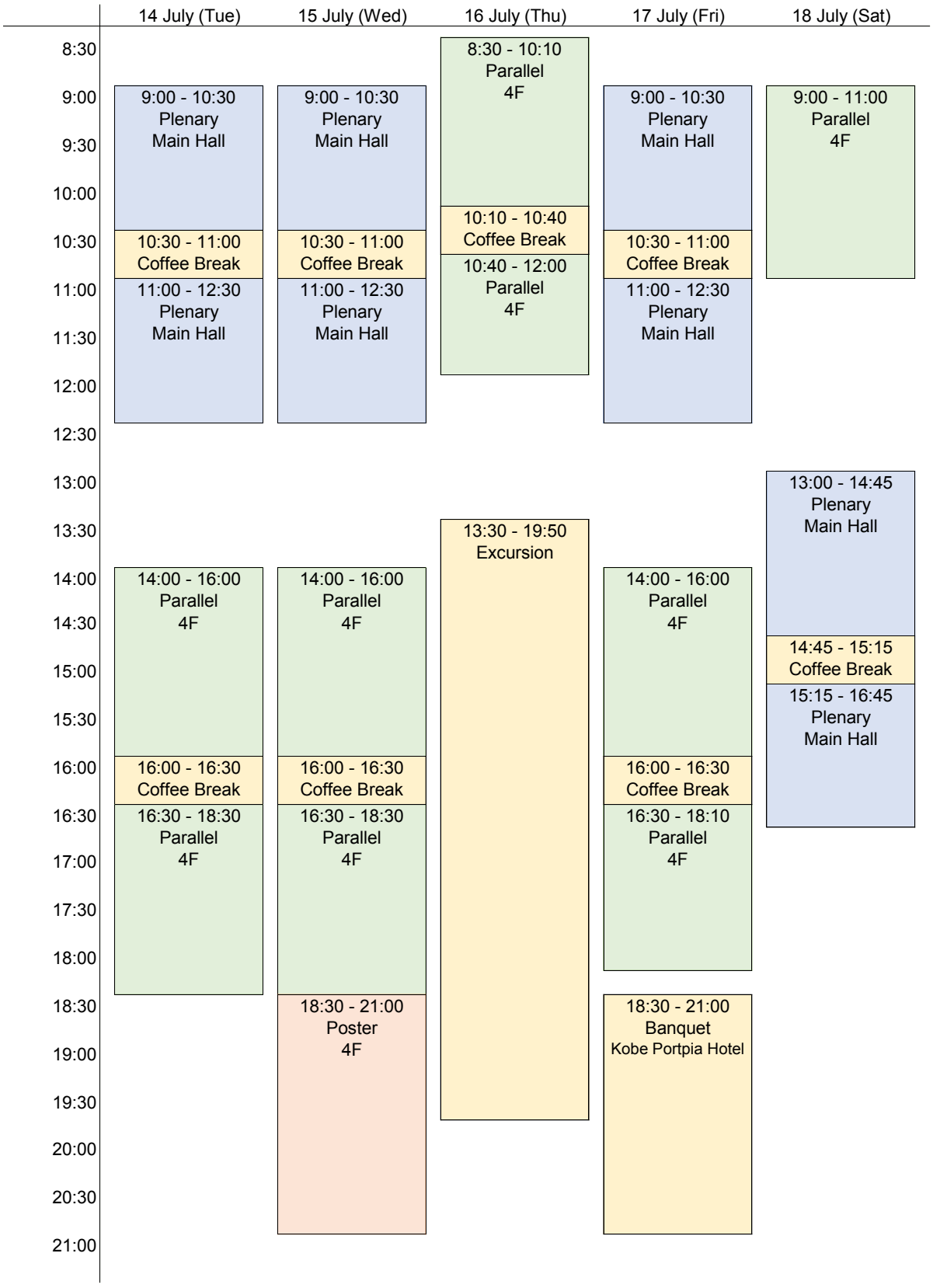
Fujitsu Limited

Hitachi, Ltd.

NVIDIA Corporation

2 Program

2.1 Overview



2.2 Plenary Talks (Main Hall)

2.2.1 July 14 (Tuesday) 9:00 – 10:30

14 Jul (Tue) Main Hall		Plenary Session (Chair: Philippe de Forcrand)
Time	Presenter	Title / Abstract
9:00 - 9:15		Conference Opening
9:15 - 10:00	GIUSTI, Leonardo	Recent progress on chiral symmetry breaking in QCD
		I review recent progress achieved on the lattice in the understanding of chiral symmetry breaking in QCD. Emphasis is given to recent computations of the spectral density of the Dirac operator and of the topological susceptibility.
10:00 - 10:30	NAKAYAMA, Yu	Determining the order of chiral phase transition in QCD from conformal bootstrap
		There has been a longstanding debate if the chiral phase transition in two-flavor massless QCD is the first order or the second order. The previous arguments based on epsilon expansions, large N expansions, functional renormalization group, and Monte-Carlo simulations had been all inconclusive with shortcomings. If it were the second order phase transition, there should exist a corresponding three-dimensional conformal field theory which describes the critical phenomenon. The recent development in conformal bootstrap enables us to directly study the (non-)existence of conformal fixed points in a non-perturbative manner. In this talk, I review the conformal bootstrap method and its application to this problem. Our conclusion is that the corresponding conformal fixed point should exist and the phase transition will be the second order if the U(1) chiral anomaly is effectively restored. This means that the original 1-loop prediction by Pisarski and Wilczek would be incorrect. We further provide the most precise prediction of the critical exponent there. We believe future numerical simulations will confirm our prediction.
10:30 - 11:00		Coffee Break

2.2.2 July 14 (Tuesday) 11:00 – 12:30

14 Jul (Tue) Main Hall		Plenary Session (Chair: Maarten Golterman)
Time	Presenter	Title / Abstract
11:00 - 11:45	AOYAMA, Tatsumi	Numerical evaluation of QED contribution to lepton g-2
		The anomalous magnetic moment (g-2) of the electron has played the central role in testing the validity of quantum electrodynamics (QED) as well as the standard model of particle physics. The test has been further improved, which was made possible by the complete evaluation of the tenth-order term in the perturbation theory of QED, together with the latest measurement of the electron g-2 by the Harvard group that has reached the precision of 0.24 ppb. In this talk we will present the numerical approach to the evaluation of QED contribution to lepton g-2 up to the recent developments.
11:45 - 12:30	IZUBUCHI, Taku	Lattice QCD moments - g-2 and NEDM -
		There has been much progress in studies of the physics of low energy, precision observables in the flavor neutral sector using Lattice QCD, especially on the lepton anomalous magnetic moments (g-2) and nucleon electric dipole moments. The current status of these studies is reviewed, and remaining challenges and new ideas are discussed.

2.2.3 July 15 (Wednesday) 9:00 – 10:30

15 Jul (Wed) Main Hall		Plenary Session (Chair: Steven Gottlieb)
Time	Presenter	Title / Abstract
9:00 - 9:45	ZANOTTI, James	Hadron Structure from Lattice QCD
		Here we review the progress made in understanding the internal structure of hadrons in terms of the gluonic and quark constituents. Recent results for standard observables such as the nucleon axial charge, electromagnetic form factors and quark momentum fraction will be summarised, before turning our attention to more challenging quantities, including quark disconnected contributions and so-called parton quasi-distribution functions. With many new experiments whose primary goal is to understand the internal dynamics of hadrons now underway, particular emphasis will be given to lattice calculations that promise to assist and guide these experimental efforts.
9:45 - 10:30	JUETTNER, Andreas	Light flavours
		For quite some time now simulations of lattice QCD have allowed for predicting a basic set of light flavour quantities reliably and with increasingly high precision. The field has started to move on: Advances in field theory, algorithms and computing for the first time allow to address more complicated problems like for example hadronic and rare kaon decays, the kaon mass-difference or the conceptually clean inclusion of electromagnetic and isospin effects. This talk aims at providing an overview over the state-of-the-art.
10:30 - 11:00		Coffee Break

2.2.4 July 15 (Wednesday) 11:00 – 12:30

15 Jul (Wed) Main Hall		Plenary Session (Chair: Sinya Aoki)
Time	Presenter	Title / Abstract
11:00 - 11:30		Kenneth G. Wilson Award for Excellence in Lattice Field Theory
11:30 - 12:00	HANSEN, Maxwell	Three-body observables from the lattice
		Scattering and transition amplitudes with three-hadron final states play an important role in nuclear and particle physics. In order to predict such quantities using Lattice QCD, formalism is required to overcome the limitations of Euclidean time and finite volume. In this talk I will focus on extensions of Luescher's work relating the finite-volume energy spectrum to physical scattering amplitudes. I will highlight the challenges that arise in extending the formalism from two-to three-particle states, and will describe how these have been addressed. Finally, I will outline outstanding problems and discuss the prospects of applying the formalism in a numerical Lattice QCD calculation.
12:00 - 12:30	KELLY, Christopher	Standard-model prediction for direct CP violation in K->pi pi decays
		We discuss our recent publication [arXiv:1505.07863] of the first lattice QCD calculation of the complex kaon decay amplitude A_0 with physical kinematics, using a single 32^3 x 64 domain wall ensemble with G-parity spatial boundary conditions. We obtain approximate agreement with the experimental value for Re(A_0), which serves as a test of our method. Our prediction of Im(A_0) can be used to compute the direct CP violating ratio Re(ε'/ε), which we find to be ~2 sigma lower than the experimental value. This result provides a new test of the Standard Model theory of CP violation, one which can be made more accurate with increasing computer capability.

2.2.5 July 17 (Friday) 9:00 – 10:30

17 Jul (Fri) Main Hall		Plenary Session (Chair: Hiroshi Suzuki)
Time	Presenter	Title / Abstract
9:00 - 9:45	UNSAL, Mithat	What is QFT? Resurgent trans-series, Lefschetz thimbles, and new exact saddles
		Resurgent trans-series provide a novel mathematical formalism to unify perturbative and non-perturbative physics, leading to new insights into the general structure of quantum theories. I will review the main ideas with some illustrative examples. In many quantum mechanical systems, all orders non-perturbative data is encoded into perturbation theory, and it can be decoded. In QFTs, there are cases in which resurgence provides a new interpretation of IR-renormalon puzzle, reveals the existence of many new saddles (such as magnetic and neutral bions), and potentially provide a non-perturbative continuum definition of QFT in a semi-classical domain. I will also describe a new perspective on path integration, which is intimately tied with resurgence theory and employs some tools of Picard-Lefschetz theory. This perspective leads to many dramatic and surprising results, and implies that the proper framework to study semi-classics in path integral formulation is yet to be developed.
9:45 - 10:30	SANNINO, Francesco	Lattice's Bright, Dark and Safe side
		Circa 95% of the universe is made of unknown forms of matter and energy, while to describe the remaining 5% one needs at least three fundamental forces, i.e. Quantum Electrodynamics, Weak Interactions and Quantum Chromo Dynamics (QCD). Furthermore strong interactions are responsible for creating the bulk of the bright mass, i.e. the 5%. It is therefore natural to expect that to correctly describe the rest of our universe while providing a sensible link to the visible component new forces will soon emerge. For example the standard model sector responsible for breaking the electroweak symmetry spontaneously could be replaced by a new and more natural strongly coupled sector. Another interesting avenue is the possibility that dark matter itself, as the ordinary proton and neutron, is not an elementary particle but rather a state composed by new strongly coupled matter. I will argue that models of composite dynamics are indeed primary candidates for a better understanding of the origin of bright and dark matter in Nature. I will also show by reviewing recent results that Lattice field methods can provide clear and falsifiable predictions for the Large Hadron Collider experiment as well as dark matter direct experiments searches. I will then switch gear and exhibit the first proof of existence of nonsupersymmetric and non-asymptotically free 4D Gauge-Yukawa theories (structurally similar to the standard model) that are UV finite thanks to the existence of an exact interacting quantum UV fixed point in the gauge, Yukawa and scalar self-couplings. These theories are therefore asymptotically safe. Theories with this behaviour have been searched for on the lattice for the past several decades. The results show the critical ingredients needed to construct these new classes of theories and offer a strategy for future lattice studies. I will then comment on the wide phenomenological impact of this discovery. Understanding strong dynamics is therefore crucial to construct phenomenologically relevant extensions of the standard model of particle interactions, and ultimately being able to describe our Universe.
10:30 - 11:00		Coffee Break

2.2.6 July 17 (Friday) 11:00 – 12:30

17 Jul (Fri) Main Hall		Plenary Session (Chair: Rainer Sommer)
Time	Presenter	Title / Abstract
11:00 - 11:45	IIJIMA, Toru	Physics at the Belle II experiment and Lattice QCD
		In this talk, we discuss the status and x10^35 cm^-2 s^-1. This enables us to study decays of heavy flavor particles, B and D mesons as well as t leptons, at the order of O(10^10) per year, and to search for New Physics through processes sensitive to presence of virtual heavy particles. We present physics reach, status and plan of the experiment. We also discuss the inputs necessary from lattice QCD calculations, in order to identify effects of New Physics.
11:45 - 12:30	PENA, Carlos	Progress and prospects for heavy flavour physics on the lattice
		I will review recent progress in lattice computations relevant for B- and charm physics. Emphasis will be put on the interplay with the upcoming new generation of experimental results.

2.2.7 July 18 (Saturday) 13:00 – 14:45

18 Jul (Sat) Main Hall		Plenary Session (Chair: Kazuyuki Kanaya)
Time	Presenter	Title / Abstract
13:00 - 13:45	MEYER, Harvey	QCD at non-zero temperature from the lattice
		I will review the status of calculations of thermodynamics quantities, spatial correlation lengths and real-time properties of strongly interacting matter at non-zero temperature. An attempt at a synthesis will be made. Quark number susceptibilities will not be covered here.
13:45 - 14:15	BORSANYI, Szabolcs	Fluctuations of conserved charges at finite temperature and density
		Fluctuations of conserved charges in a grand canonical ensemble can be calculated as derivatives of the free energy with respect to the respective chemical potential. They are directly related to experimentally available observables that describe the hadronization in heavy ion collisions. The same derivatives can be used to extrapolate zero density results to finite chemical potential. We review the recent lattice calculations in the staggered formalism and discuss its implications to phenomenology and resummed perturbation theory.
14:15 - 14:45	SCORZATO, Luigi	The Lefschetz thimble and the sign problem
		In this talk I will review the proposal to formulate quantum field theories (QFTs) on a Lefschetz thimble, which was put forward to enable Monte Carlo simulations of lattice QFTs affected by a sign problem. First I will review the theoretical justification of the approach, and comment on some open issues. Then, I will review the algorithms that have been proposed and are being tested to represent and simulate a lattice QFT on a Lefschetz thimble. In particular, I will review the lessons from the very first models of QFTs that have been studied with this approach.
14:45 - 15:15		Coffee Break

2.2.8 July 18 (Saturday) 15:15 – 16:45

18 Jul (Sat) Main Hall		Plenary Session (Chair: Norman Christ)
Time	Presenter	Title / Abstract
15:15 - 15:45	KADOH, Daisuke	Recent progress in lattice supersymmetry -- from lattice gauge theory to black hole
		Non-perturbative investigations of supersymmetry and superstring theory through lattice simulations are promising research directions. In this talk, I will review the recent progress in lattice supersymmetry, in particular, the numerical verification of the gauge/gravity duality.
15:45 - 16:30	HASENFRATZ, Anna	Beyond the Standard Model: lattice calculations at the energy frontier
		The discovery of the Higgs boson in 2012 completed the Standard Model but many puzzles remain. Composite systems where the Higgs boson is a bound state of some new fermion species are viable models to describe beyond-SM phenomenology, but are most likely strongly coupled and require non-perturbative investigations. In this talk I will review recent lattice calculations that investigate general properties of near-conformal systems and might describe the Higgs boson.
16:30 - 16:45		Conference Closing

2.3 Parallel Sessions (Fourth Floor)

All parallel sessions are held on the fourth floor in Kobe International Conference Center. There are six rooms in the floor. Parallel session talks are 15 minutes, plus 5 minutes for discussion.

Laptops with projectors will be available in all rooms. Please prepare your presentation in Adobe Portable Document Format (.pdf) or Microsoft PowerPoint Format (.ppt, .pptx). ***No other formats can be supported.***

You are required to upload your presentation via the Indico system at least ***one hour prior*** to the start of your session. There is "My contributions" in the menu after logging-in. Please select it and click the "View" link. Then you can find "Edit files" and upload your presentation.

	14 Jul (Tue)		15 Jul (Wed)		16 Jul (Thu)		17 Jul (Fri)		18 Jul (Sat)
	14:00-16:00	16:30-18:30	14:00-16:00	16:30-18:30	8:30-10:10	10:40-12:00	14:00-16:00	16:30-18:10	9:00-11:00
Room 401	NZTD	NZTD	NZTD	NZTD	NZTD	NZTD	NZTD	NZTD	NZTD
Room 402	HSP	HSP	HSP	HSP	HSP	TD	TD	TD	TD
Room 403	HST	HST	HST	HST	HST	HST	NZTD	NZTD	HST
Room 404	SMPR	SMPR	SMPR / HSP	SMPR	CSYM	CSYM	VSC	VSC	BQCD
Room 405	BSM	BSM	BSM	BSM	BSM	ALG	BQCD	ALG	BSM
Room 406	ALG	WDME	TD	TD	WDME	WDME	WDME	WDME	NZTD

ALG : Algorithms and Machines
BQCD : Applications Beyond QCD
CSYM : Chiral Symmetry
HSP : Hadron Spectroscopy and Interactions
HST : Hadron Structure
NZTD : Nonzero Temperature and Density
BSM : Physics Beyond the Standard Model
SMPR : Standard Model Parameters and Renormalization
TD : Theoretical Developments
VSC : Vacuum Structure and Confinement
WDME : Weak Decays and Matrix Elements

2.3.1 July 14 (Tuesday) 14:00 – 18:30

- **Room 401**

14 July (Tue) 401	Nonzero Temperature and Density (Chair: Owe Philipsen)	
	Presenter	Title
14:00-14:20	HEGDE, Prasad	The curvature of the chiral phase transition line at small values of the quark chemical potentials
14:20-14:40	GUENTHER, Jana	The curvature of the crossover line in the (T, mu)-phase diagram of QCD
14:40-15:00	COSMAI, Leonardo	Curvature of the pseudocritical line in (2+1)-flavor QCD with HISQ fermions
15:00-15:20	MESITI, Michele	Curvature of the QCD chiral peusdocritical line from analytic continuation
15:20-15:40	TAKEDA, Shinji	Phase structure of Nf=3 QCD at finite temperature and density by Wilson-Clover fermions
15:40-16:00	IWAMI, Ryo	Many flavor approach to study the critical point in finite density QCD
16:00-16:30	Coffee Break	
14 July (Tue) 401	Nonzero Temperature and Density (Chair: Sourendu Gupta)	
	Presenter	Title
16:30-16:50	YAMADA, Norikazu	Many flavor approach to study the nature of chiral phase transition of two-flavor QCD
16:50-17:10	CZABAN, Christopher	The nature of the Roberge-Weiss Transition in N_f=2 QCD with Wilson Fermions on N_t=6 lattices
17:10-17:30	PINKE, Christopher	The $N_f=2$ chiral phase transition from imaginary chemical potential with Wilson Fermions
17:30-17:50	YONEYAMA, Hiroshi	Analytic continuation of finite density QCD with heavy quarks in the strong coupling region
17:50-18:10	KASHIWA, Kouji	Topological feature and phase diagram of QCD at complex chemical potential
18:10-18:30	MISUMI, Tatsuhiro	Finite-temperature phase transition of Nf=3 QCD with exact center symmetry

- **Room 402**

14 July (Tue) 402	Hadron Spectroscopy and Interactions (Chair: Naruhito Ishizuka)	
	Presenter	Title
14:00-14:20	HÖRZ, Ben	Pion-pion interaction from N_f = 2+1 simulations using the stochastic LapH method
14:20-14:40	BULAVA, John	Large volume calculation of pion-pion scattering phase shifts with the stochastic LapH method on an $N_f=2+1$ anisotropic clover lattice
14:40-15:00	JANOWSKI, Tadeusz	K-pi scattering lengths from physical point ensembles
15:00-15:20	DONALD, Gordon	K-pi and pi-pi scattering close to the physical pion mass
15:20-15:40	CHEN, Ying	The mass and leptonic decay constant of rho meson at the physical point
15:40-16:00	GUO, Dehua	Resonance Parameters for the rho-meson from Lattice QCD
16:00-16:30	Coffee Break	
14 July (Tue) 402	Hadron Spectroscopy and Interactions (Chair: Tomomi Ishikawa)	
	Presenter	Title
16:30-16:50	FAHY, Brendan	Decay constants and spectroscopy of mesons in lattice QCD using domain-wall fermions
16:50-17:10	UKITA, Naoya	2+1 flavor QCD simulation near the physical point on a 96^4 lattice
17:10-17:30	SOELDNER, Wolfgang	Latest Results from RQCD using 2+1f CLS Simulations with Open Boundaries
17:30-17:50	FUKAYA, Hidenori	Extracting the eta-prime meson mass from gluonic correlators in lattice QCD
17:50-18:10	ENDRES, Michael	Photon mass term as an IR regularization for QCD+QED on the lattice
18:10-18:30	RAKOW, Paul	Dashen's theorem and electromagnetic contributions to pseudoscalar meson masses

- **Room 403**

14 July (Tue) 403	Hadron Structure (Chair: Georg von Hippel)	
	Presenter	Title
14:00-14:20	JIN, Luchang	Hadronic Light by Light Contributions to the Muon Anomalous Magnetic Moment With Near Physical Pions
14:20-14:40	HAYAKAWA, Masashi	On calculating disconnected-type hadronic light-by-light scattering diagrams from lattice QCD
14:40-15:00	LEHNER, Christoph	Improving the volume-dependence of lattice QCD+QED simulations
15:00-15:20	SPRAGGS, Matt	The strange contribution to the anomalous magnetic moment of the muon with physical quark masses using Mebius domain wall fermions
15:20-15:40	PORTELLI, Antonin	Finite volume hadronic vacuum polarisation at arbitrary momenta
15:40-16:00	CHAKRABORTY, Bipasha	Lattice calculation of the HVP contribution to the anomalous magnetic moment of muon
16:00-16:30	Coffee Break	
14 July (Tue) 403	Hadron Structure (Chair: Masashi Hayakawa)	
	Presenter	Title
16:30-16:50	GREEN, Jeremy	Direct calculation of hadronic light-by-light scattering
16:50-17:10	HERDOIZA, Gregorio	Study of the hadronic contributions to the running of the QED coupling
17:10-17:30	HORCH, Hanno	The hadronic vacuum polarization function with O(a)-improved Wilson fermions - an update
17:30-17:50	GOLTERMAN, Maarten	Finite volume effects in hadronic vacuum polarization
17:50-18:10	GREGORY, Eric	A derivative based approach for the leading order hadronic contribution to g-2 of the muon
18:10-18:30	MARINKOVIC, Marina	Leading isospin breaking correction to the hadronic vacuum polarisation

- **Room 404**

14 July (Tue) 404	Standard Model Parameters and Renormalization (Chair: Francesco Knechtli)	
	Presenter	Title
14:00-14:20	SINT, Stefan	A status update on the ALPHA collaboration's project to determine the Lambda-parameter in 3-flavour QCD
14:20-14:40	FRITZSCH, Patrick	Prospects and status of quark mass renormalization in three-flavour QCD
14:40-15:00	PRETI, David	Non-perturbative renormalization of tensor bilinears in Schrodinger Functional schemes
15:00-15:20	SCHAEFER, Stefan	Scale determination for the CLS 2+1 ensembles
15:20-15:40	VILASECA MAINAR, Pol	Perturbative renormalization of $\Delta S = 2$ four-fermion operators with the chirally rotated Schroedinger functional
15:40-16:00	DALLA BRIDA, Mattia	The chirally rotated Schroedinger functional at work
16:00-16:30	Coffee Break	
14 July (Tue) 404	Standard Model Parameters and Renormalization (Chair: Stefan Schaefer)	
	Presenter	Title
16:30-16:50	KORCYL, Piotr	Non-perturbative renormalization of the static quark theory in a large volume
16:50-17:10	WITTEMEIER, Christian	Implementation of a non-perturbative matching strategy between heavy-light currents in HQET and QCD
17:10-17:30	KNECHTLI, Francesco	Perturbative versus non-perturbative decoupling of heavy quarks
17:30-17:50	PARK, Sungwoo	Nonperturbative renormalization in the RI-SMOM scheme and Gribov copies for staggered bilinears
17:50-18:10	LYTLE, Andrew	NPR determination of quark masses from the HISQ action
18:10-18:30	GOTTLIEB, Steven	Electromagnetic effects on the light pseudoscalar mesons and determination of m_u/m_d

- **Room 405**

14 July (Tue) 405	Physics Beyond the Standard Model (Chair: C.J. David Lin)	
	Presenter	Title
14:00-14:20	OHKI, Hiroshi	Walking and conformal dynamics in many flavor QCD
14:20-14:40	BENNETT, Ed	Topological observables in many-flavour QCD
14:40-15:00	KURACHI, Masafumi	SU(3) gauge theory with four degenerate fundamental fermions on the lattice
15:00-15:20	REBBI, Claudio	Studying near conformal behavior with four light flavors and eight flavors of variable mass.
15:20-15:40	WEINBERG, Evan	Probing near conformal dynamics with 4+8 and 8 flavors: running coupling and the spectrum
15:40-16:00	NAKAYAMA, Yu	IR fixed points and conformal window in $SU(3)$ gauge Theories
16:00-16:30	Coffee Break	
14 July (Tue) 405	Physics Beyond the Standard Model (Chair: Claudio Rebbi)	
	Presenter	Title
16:30-16:50	KUTI, Julius	A minimal model of the composite Higgs and its Goldstone dynamics
16:50-17:10	CHIK HIM, Wong	Hadron Spectroscopy with a low-mass composite scalar in the sextet model
17:10-17:30	MONDAL, Santanu	Taste symmetry restoration in the sextet model with staggered fermions
17:30-17:50	NOGRADI, Daniel	Running coupling of the sextet composite Higgs model
17:50-18:10	HANSEN, Martin	Conformal symmetry vs. chiral symmetry breaking in the SU(3) sextet model

- **Room 406**

14 July (Tue) 406	Algorithms and Machines (Chair: Nigel Cundy)	
	Presenter	Title
14:00-14:20	MCGLYNN, Greg	Algorithmic improvements for weak coupling simulations of domain wall fermions
14:20-14:40	JUNG, Chulwoo	zMobius and other recent developments on Domain Wall Fermions
14:40-15:00	BUSSONE, Andrea	Fermionic twisted boundary conditions with reweighting method
15:00-15:20	LIN, Meifeng	Optimizing the domain wall fermion Dirac operator using the R-Stream source-to-source compiler
15:20-15:40	BOYLE, Peter	A next generation C++ library for data parallel QCD
16:00-16:30	Coffee Break	
14 July (Tue) 406	Weak Decays and Matrix Elements (Chair: Amarjit Soni)	
	Presenter	Title
16:30-16:50	KANEKO, Takashi	Chiral behavior of light meson form factors in 2+1 flavor QCD with exact chiral symmetry
16:50-17:10	SACHRAJDA, Christopher	QED Corrections to Hadronic Processes in Lattice QCD
17:10-17:30	HUDSPITH, Renwick	Neutral Kaon mixing beyond the Standard Model
17:30-17:50	DRAGOS, Jack	Improved Hadronic Matrix Element Determination Using the Variational Method
17:50-18:10	KURTH, Thorsten	Nuclear Parity Violation from Lattice QCD

2.3.2 July 15 (Wednesday) 14:00 – 18:30

- **Room 401**

15 July (Wed) 401	Nonzero Temperature and Density (Chair: Atsushi Nakamura)	
	Presenter	Title
14:00-14:20	SINCLAIR, D. K.	Exploring Complex-Langevin Methods for Finite-Density QCD
14:20-14:40	ATTANASIO, Felipe	Towards the heavy dense QCD phase diagram using Complex Langevin simulations
14:40-15:00	JAEGER, Benjamin	Insights into the heavy dense QCD phase diagram using Complex Langevin simulations
15:00-15:20	NAGATA, Keitaro	Testing a generalized cooling procedure in the complex Langevin simulation of chiral Random Matrix Theory
15:20-15:40	SHIMASAKI, Shinji	Understanding the problem with logarithmic singularities in the complex Langevin method
15:40-16:00	BLOCH, Jacques	Complex Langevin in low-dimensional QCD: the good and the not-so-good
16:00-16:30	Coffee Break	
15 July (Wed) 401	Nonzero Temperature and Density (Chair: Carleton DeTar)	
	Presenter	Title
16:30-16:50	MARITI, Marco	Magnetic properties and deconfinement
16:50-17:10	NAKAMURA, Yoshifumi	Towards the continuum limit of the critical endline of finite temperature QCD
17:10-17:30	DING, Heng-tong	Chiral phase transition of N_f=3 and 2+1 QCD at vanishing baryon chemical potential
17:30-17:50	KITAZAWA, Masakiyo	Thermodynamics and reference scale of SU(3) gauge theory from gradient flow on fine lattices
17:50-18:10	SCHADLER, Hans-peter	Polyakov loop renormalization with gradient flow
18:10-18:30	MAGES, Simon	Pure SU(3) Topological Susceptibility at Finite Temperature with the Wilson Flow

- **Room 402**

15 July (Wed) 402	Hadron Spectroscopy and Interactions (Chair: Michael Endres)	
	Presenter	Title
14:00-14:20	DETMOLD, William	Magnetic properties of light nuclei and the $n p ¥to d ¥gamma$ transition
14:20-14:40	YAMAZAKI, Takeshi	Light nuclei and nucleon form factors in N_f=2+1 lattice QCD
14:40-15:00	JUNNARKAR, Parikshit	The H-dibaryon in two flavor lattice QCD
15:00-15:20	NICHOLSON, Amy	Two-nucleon scattering in multiple partial waves
15:20-15:40	PETSCHLIES, Marcus	Calculation of the decay width of decuplet baryons
15:40-16:00	SUN, Mingyang	The Roper resonance from spatially large interpolation fields
16:00-16:30	Coffee Break	
15 July (Wed) 402	Hadron Spectroscopy and Interactions (Chair: William Detmold)	
	Presenter	Title
16:30-16:50	DOI, Takumi	First results of baryon interactions from lattice QCD with physical masses (1) -- General overview and two-nucleon forces
16:50-17:10	ISHII, Noriyoshi	First results of baryon interaction from lattice QCD with physical masses (2) -- S=-3 and S=-4 sectors (XiXi, XiSigma, XiLambda-XiSigma channels) --
17:10-17:30	SASAKI, Kenji	First results of baryon interactions from lattice QCD with physical masses (3) -- Strangeness S=-2 two-baryon system
17:30-17:50	IRITANI, Takumi	Lattice QCD studies of baryon interactions from HAL QCD method and Luscher's finite volume method
17:50-18:10	MIYAMOTO, Takaya	Lambda_c-N interaction from lattice QCD
18:10-18:30	IKEDA, Yoichi	Zc(3900) from coupled-channel HAL QCD approach on the lattice

- **Room 403**

15 July (Wed) 403	Hadron Structure (Chair: Paul Rakow)	
	Presenter	Title
14:00-14:20	LIU, Keh-fei	Parton Distribution Function from Hadronic Tensor
14:20-14:40	YOON, Boram	Nucleon transverse momentum-dependent parton distributions: Comparing Clover and Domain wall fermion results at ~300 MeV pion mass
14:40-15:00	ENGELHARDT, Michael	Lattice QCD calculations of nucleon transverse momentum-dependent parton distributions (TMDs) at 170 MeV pion mass
15:00-15:20	ROEDL, Rudolf	Nucleon generalized form factors from lattice QCD with nearly physical quark masses
16:00-16:30	Coffee Break	
15 July (Wed) 403	Hadron Structure (Chair: Keh-fei Liu)	
	Presenter	Title
16:30-16:50	KOPONEN, Jonna	Pion electromagnetic form factor from full lattice QCD
16:50-17:10	SASAKI, Shoichi	SU(3)-breaking effects and induced second-class form factors in hyperon beta decays from 2+1 flavor lattice QCD
17:10-17:30	YAMANAKA, Nodoka	Nucleon axial and tensor charges with dynamical overlap quarks
17:30-17:50	SHINTANI, Eigo	High statistic analysis of nucleon form factors and charges in lattice QCD
17:50-18:10	BAER, Oliver	Nucleon-pion-state contributions in the determination of the nucleon axial charge
18:10-18:30	OHTA, Shigemi	Some nucleon isovector obsesrvables from 2+1-flavor domain-wall QCD at physical mass

- **Room 404**

15 July (Wed) 404	Standard Model Parameters and Renormalization / Hadron Spectroscopy and Interactions (Chair: Patrick Fritzsch)	
	Presenter	Title
14:00-14:20	MALTMAN, Kim	Lattice input on the tau V_us puzzle
14:20-14:40	LAMI, Paolo	Scalar and vector form factors of $D ¥to ¥pi ¥ell ¥nu$ decays with $N_f=2+1+1$ Twisted fermions
14:40-15:00	FRISON, Julien	Nf=2+1+1 renormalisation of four-quark operators
15:00-15:20	GUELPERS, Vera	The leading hadronic contribution to $¥gamma$-Z mixing
15:20-15:40	HORSLEY, Roger	Determining the scale in Lattice QCD
15:40-16:00	BRANDT, Bastian	QCD spectroscopy and quark mass renormalisation in external magnetic fields with Wilson fermions
16:00-16:30	Coffee Break	
15 July (Wed) 404	Standard Model Parameters and Renormalization (Chair: Stefan Sint)	
	Presenter	Title
16:30-16:50	TOMII, Masaaki	Analysis of short distance current correlators using OPE
16:50-17:10	NAKAYAMA, Katsumasa	Charmonium current-current correlators with Mobius domain-wall fermion
17:10-17:30	LEWIS, Randy	Determining the QCD coupling from lattice vacuum polarization
17:30-17:50	SCHIERHOLZ, Gerrit	Light quark masses from infrared fixed point
17:50-18:10	BRAMBILLA, Michele	Clover fermions in Numerical Stochastic Perturbation Theory

- **Room 405**

15 July (Wed) 405	Physics Beyond the Standard Model (Chair: Julius Kuti)	
	Presenter	Title
14:00-14:20	LIN, C.-j. David	Lattice study for conformal windows of SU(2) and SU(3) gauge theories with fundamental fermions
14:20-14:40	TÄHTINEN, Sara	Approaching the conformal window: systematic study of the particle spectrum in SU(2) field theory with N_f =2,4 and 6.
14:40-15:00	LEINO, Viljami	Gradient flow and IR fixed point in SU(2) with Nf=8 flavors
15:00-15:20	BERGNER, Georg	Lattice simulations of technicolour theories with adjoint fermions and supersymmetric Yang-Mills theory
15:20-15:40	RANTAHARJU, Jarno	Wilson Fermions with Four Fermion Interactions
16:00-16:30	Coffee Break	
15 July (Wed) 405	Physics Beyond the Standard Model (Chair: Daniel Nogradi)	
	Presenter	Title
16:30-16:50	AKERLUND, Oscar	Effects of higher order operators on the Standard Model Higgs sector
16:50-17:10	CHU, David Y. -j.	Lattice study of the Higgs-Yukawa model in and beyond the Standard Model
17:10-17:30	MOIR, Graham	Non-Perturbative Gauge-Higgs Unification in Five Dimensions
17:30-17:50	LAMBROU, Eliana	Five-dimensional Gauge Theories in a Warped Background
17:50-18:10	RUMMUKAINEN, Kari	Gravitational waves from cosmological first order phase transitions

- **Room 406**

15 July (Wed) 406	Theoretical developments (Chair: Yannick Meurice)	
	Presenter	Title
14:00-14:20	KENNEDY, Anthony	Renormalizability of the Schdinger Functional.
14:20-14:40	IVANOV, Aleksandr	Convergent Perturbation Theory for ϕ^4 model on lattice
14:40-15:00	LOHMAYER, Robert	Induced YM theory with auxiliary bosons
15:00-15:20	YAMAMURA, Ryo	Renormalization of two-dimensional XQCD
15:20-15:40	DROMARD, Arthur	Combining ordinary and topological finite volume effects for fixed topology simulations
15:40-16:00	RUSETSKY, Akaki	Three particles in a finite volume
16:00-16:30	Coffee Break	
15 July (Wed) 406	Theoretical developments (Chair: Anthony Kennedy)	
	Presenter	Title
16:30-16:50	BUYENS, Boye	Hamiltonian simulation of lattice gauge theories
16:50-17:10	BANERJEE, Debasish	Real-time simulation of dissipation-driven quantum Systems
17:10-17:30	TANIZAKI, Yuya	Lefschetz-thimble path integral for solving the mean-field sign problem
17:30-17:50	SAITO, Hana	Thermal evolution of the 1-flavour Schwinger model with using Matrix Product States
17:50-18:10	KAWAUCHI, Hikaru	Tensor renormalization group analysis of CP(N-1) model in two dimensions
18:10-18:30	MEURICE, Yannick	Approaching conformality with the Tensor Renormalization Group method

2.3.3 July 16 (Thursday) 8:30 – 12:00

- **Room 401**

16 July (Thu) 401	Nonzero Temperature and Density (Chair: Akira Ohnishi)	
	Presenter	Title
8:30-8:50	TANIGUCHI, Yusuke	Study of high density phase transition in lattice QCD with canonical approach
8:50-9:10	OKA, Shotaro	Exploring finite density QCD phase transition with canonical approach - Power of multiple precision computation -
9:10-9:30	FUKUDA, Ryutaro	Validity range of canonical approach to finite density QCD
9:30-9:50	SUZUKI, Asobu	Calculation of high-order cumulants with canonical ensemble method in lattice QCD
9:50-10:10	DE FORCRAND, Philippe	Aspects of topological actions on the lattice
10:10-10:40	Coffee Break	
16 July (Thu) 401	Nonzero Temperature and Density (Chair: Heng-Tong Ding)	
	Presenter	Title
10:40-11:00	VAIRINHOS, Helvio	Diagrammatic Monte Carlo simulations of staggered fermions at finite coupling
11:00-11:20	RINDLISBACHER, Tobias	Lattice simulation of the SU(2)-chiral model at zero and non-zero pion density
11:20-11:40	PHILIPSEN, Owe	Heavy and dense QCD from an effective lattice theory
11:40-12:00	GLESAAEN, Jonas Rylund	Analytic computations of an effective lattice theory for heavy quarks

- **Room 402**

16 July (Thu) 402	Hadron Spectroscopy and Interactions (Chair: Chris Allton)	
	Presenter	Title
8:30-8:50	MADANAGOPALAN, Padmanath	X(3872) and Y(4140) using diquark-antidiquark operators with lattice QCD
8:50-9:10	CICHY, Krzysztof	Mass spectrum of mesons containing charm quarks - continuum limit results from twisted mass fermions
9:10-9:30	RAE, Thomas	Ground state charmed meson spectra for $N_f=2+1+1$
9:30-9:50	PETERS, Antje	Exploring possibly existing qq-anti-b-anti-b tetraquark states with qq = ud, ss, cc
9:50-10:10	BERLIN, Joshua	Computation of correlation matrices for tetraquark candidates with $J^P = 0^+$ and flavor structure $q_1 ¥bar{q_2} q_3 ¥bar{q}_3$
10:10-10:40	Coffee Break	
16 July (Thu) 402	Theoretical developments (Chair: Tatsuhiro Misumi)	
	Presenter	Title
10:40-11:00	ZIELINSKI, Christian	Pion spectrum for the 2-flavor staggered Wilson fermion
11:00-11:20	OSBORN, James	Flavor Filtered Fermions
11:20-11:40	PATELLA, Agostino	Charged particles in QED with C* boundary conditions I
11:40-12:00	TANTALO, Nazario	Charged particles in QED with C* boundary conditions II

- **Room 403**

16 July (Thu) 403	Hadron Structure (Chair: Shigemi Ohta)	
	Presenter	Title
8:30-8:50	YOUNG, Ross	Applications of the Feynman-Hellmann theorem in hadron structure
8:50-9:10	KUTAK, Krzysztof	Gluon saturation and gluon densities
9:10-9:30	VARNHORST, Lukas	Nucleon-Sigma-Terms from Lattice QCD
9:30-9:50	TORRERO, Christian	A lattice study of the nucleon quark content at the physical point
9:50-10:10	YANG, Yibo	Proton spin decomposition with overlap fermion
10:10-10:40	Coffee Break	
16 July (Thu) 403	Hadron Structure (Chair: Ross Young)	
	Presenter	Title
10:40-11:00	GUPTA, Rajan	Nucleon charges, form-factors and neutron EDM
11:00-11:20	ATHENODOROU, Andreas	The electric dipole moment of the neutron from N_f=2+1+1 twisted mass fermions
11:20-11:40	SYRITSYN, Sergey	Neutron-antineutron oscillation matrix elements with domain wall fermions at the physical point
11:40-12:00	CAN, Utku	Electromagnetic structure of the charmed baryons - extended to spin-3/2

- **Room 404**

16 July (Thu) 404	Chiral Symmetry (Chair: Robert Mawhinney)	
	Presenter	Title
8:30-8:50	AYYAR, Venkit	Exotic Quantum Critical Points with Staggered Fermions
8:50-9:10	NISHIGAKI, Shinsuke	Distribution of the k-th smallest Dirac operator eigenvalue : an update
9:10-9:30	ZAFEIROPOULOS, Savvas	The microscopic Twisted Mass Dirac spectrum and the spectral determination of the LECs of Wilson χ-PT
9:30-9:50	VERBAARSCHOT, Jacobus	Chiral Symmetry Breaking for Bosonic Partition Functions.
9:50-10:10	ALEXANDRU, Andrei	Boundary effects on the chiral condensate from Lattice QCD
10:10-10:40	Coffee Break	
16 July (Thu) 404	Chiral Symmetry (Chair: Andrei Alexandru)	
	Presenter	Title
10:40-11:00	MURPHY, David	NLO and NNLO Low Energy Constants for SU(2) Chiral Perturbation Theory
11:00-11:20	MAWHINNEY, Robert	NLO and NNLO Low Energy Constants for SU(3) Chiral Perturbation Theory
11:20-11:40	PAK, Markus	Evidence for a new SU(4) symmetry with J=2 mesons
11:40-12:00	OTTNAD, Konstantin	Testing the Witten-Veneziano Formula on the Lattice

- **Room 405**

16 July (Thu) 405	Physics Beyond the Standard Model (Chair: Hiroshi Ohki)	
	Presenter	Title
8:30-8:50	DRACH, Vincent	Template Composite Dark Matter : SU(2) gauge theory with Nf=2
8:50-9:10	RINALDI, Enrico	Stealth Dark Matter on the lattice
9:10-9:30	BERKOWITZ, Evan	Lattice QCD and Axion Cosmology
9:30-9:50	SHINDLER, Andrea	Beyond the Standard model matrix elements with the gradient flow
9:50-10:10	BHATTACHARYA, Tanmoy	Neutron EDM from quark chromoEDM
10:10-10:40	Coffee Break	
16 July (Thu) 405	Algorithms and Machines (Chair: Georg Bergner)	
	Presenter	Title
10:40-11:00	ROTTMANN, Matthias	A Multigrid Based Eigensolver for the Hermitian Wilson Dirac Operator
11:00-11:20	SIMETH, Jakob	Multigrid-accelerated Low-Mode Averaging
11:20-11:40	SUNO, Hiroya	Eigenspectrum calculation of the non-Hermitian O(a)-improved Wilson-Dirac operator using the Sakurai-Sugiura method
11:40-12:00	STRELCHENKO, Alexei	Accelerating deflation of eigenvalues for fermion matrix inversions on GPUs

- **Room 406**

16 July (Thu) 406	Weak Decays and Matrix Elements (Chair: Weonjong Lee)	
	Presenter	Title
8:30-8:50	ISHIKAWA, Tomomi	Neutral B meson mixings and B meson decay constants in the infinite b quark mass limit with domain-wall light quarks
8:50-9:10	DETAR, Carleton	Decay constants f_B and f_{B_s} from HISQ simulations
9:10-9:30	SIMONE, James	Neutral B-meson and D-meson mixing bag parameters from $2+1$ flavor lattice QCD
9:30-9:50	ZHOU, Ran	Semileptonic B-meson decay phenomenology with lattice QCD
9:50-10:10	COLQUHOUN, Brian	Phenomenology with Lattice NRQCD b Quarks.
10:10-10:40	Coffee Break	
16 July (Thu) 406	Weak Decays and Matrix Elements (Chair: Hiroshi Ohno)	
	Presenter	Title
10:40-11:00	TSANG, Justus Tobias	Charm Physics at the physical point
11:00-11:20	KHAMSEH, Ava	Neutral D-Meson Mixing near the Charm Mass
11:20-11:40	SUZUKI, Takashi	D meson semileptonic decays from lattice QCD with chiral fermions
11:40-12:00	PRIMER, Thomas	D meson semileptonic form factors at zero momentum transfer in 2+1+1 flavor lattice QCD

2.3.4 July 17 (Friday) 14:00 – 18:10

- **Room 401**

17 July (Fri) 401	Nonzero Temperature and Density (Chair: Takashi Umeda)	
	Presenter	Title
14:00-14:20	KIM, Seyong	Lattice NRQCD study of quarkonium at non-zero temperature
14:20-14:40	OHNO, Hiroshi	Charmonia and bottomonia at finite temperature on large quenched lattice
14:40-15:00	IKEDA, Atsuro	Transverse and longitudinal spectral functions of charmonia at finite temperature with maximum entropy method
15:00-15:20	WEBER, Johannes	Polyakov loop correlators and cyclic Wilson loop from lattice QCD
15:20-15:40	PASZTOR, Attila	Static quark-antiquark pair free energy and screening masses: continuum results at the QCD physical point
15:40-16:00	KONDO, Kei-ichi	Confinement/deconfinement transition temperature from the Polyakov loop potential and gauge-invariant gluon mass
16:00-16:30	Coffee Break	
17 July (Fri) 401	Nonzero Temperature and Density (Chair: Masakiyo Kitazawa)	
	Presenter	Title
16:30-16:50	SHU, Hai-tao	A stochastic approach to the reconstruction of spectral functions in lattice QCD
16:50-17:10	MEYER, Florian	Thermal dilepton rates and electrical conductivity of the QGP
17:10-17:30	PRAKI, Chrisanthi	Calculation of free baryon spectral densities at finite temperature
17:30-17:50	ALLTON, Chris	Nucleons and parity doubling across the deconfinement transition
17:50-18:10	TSUKIJI, Hidekazu	Study of entropy production in Yang-Mills theory with use of Husimi function

- **Room 402**

17 July (Fri) 402	Theoretical developments (Chair: Richard Brower)	
	Presenter	Title
14:00-14:20	RAMOS, Alberto	(Dimensional) twisted reduction in large N gauge theories
14:20-14:40	OKAWA, Masanori	Large N meson propagators from twisted space-time reduced model
14:40-15:00	AMATO, Alessandro	Topology and glueballs in $SU(7)$ Yang-Mills with open boundary conditions
15:00-15:20	BUIVIDOVICH, Pavel	Diagrammatic Monte-Carlo algorithms for large-N quantum field theories from Schwinger-Dyson equations
15:20-15:40	VALGUSHEV, Semen	Numerical study of complex instantons in the Gross-Witten U(N) matrix model
15:40-16:00	ISHIKI, Goro	Matrix Geometry and Coherent States
16:00-16:30	Coffee Break	
17 July (Fri) 402	Theoretical developments (Chair: Masanori Okawa)	
	Presenter	Title
16:30-16:50	BROWER, Richard	Lattice Conformal Field Theory on the Reimann Sphere
16:50-17:10	FLEMING, George	Scalar field theory on a 2-sphere using quantum finite element method (QFEM)
17:10-17:30	GASBARRO, Andrew	Spherical Finite Elements for Lattice Radial Quantization
17:30-17:50	AOKI, Sinya	Encoding field theories into gravities
17:50-18:10	KAWAMOTO, Noboru	Summary of Super Doubler Approach on Exact Lattice Supersymmetry

- **Room 403**

17 July (Fri) 403	Nonzero Temperature and Density (Chair: Tilo Wettig)	
	Presenter	Title
14:00-14:20	KOTOV, Andrey	Two-Color Lattice QCD with Non-zero Chiral Chemical Potential
14:20-14:40	NIKOLAEV, Alexander	Lattice simulation of QC_2D with $N_f=2$ at non-zero baryon density
14:40-15:00	TOMBOULIS, Terry E.	Cluster expansions and chiral symmetry at large density in 2-color QCD
15:00-15:20	ERUZZI, Giovanni	Thimble regularization at work besides toy models: from Random Matrix Theory to Gauge Theories.
15:20-15:40	DI RENZO, Francesco	Thimble regularization at work for Gauge Theories: from toy models onwards.
15:40-16:00	KAMATA, Syo	Application of the Lefschetz thimble formulation to the (0+1) dimensional Thirring model at finite density
16:00-16:30	Coffee Break	
17 July (Fri) 403	Nonzero Temperature and Density (Chair: Keitaro Nagata)	
	Presenter	Title
16:30-16:50	OHNISHI, Akira	Preweighting method in Monte-Carlo sampling with complex action
16:50-17:10	PELLEGRINI, Roberto	The density of states approach at finite chemical potential: a numerical study of the Bose gas.
17:10-17:30	TOEREK, Pascal	Solving the complex action problem of the finite density Z3 spin model with the density of states approach using FFA
17:30-17:50	GIULIANI, Mario	Density of states approach with FFA for an effective Polyakov loop model at finite density
17:50-18:10	GATTRINGER, Christof	Dual representation for massless fermions with chemical potential and U(1) gauge fields

- **Room 404**

17 July (Fri) 404	Vacuum Structure and Confinement (Chair: Akihiro Shibata)	
	Presenter	Title
14:00-14:20	HASEGAWA, Masayasu	Chiral symmetry breaking, instantons, and monopoles
14:20-14:40	HORVATH, Ivan	Classifying the phases of gauge theories by spectral density of probing chiral quarks
14:40-15:00	DOI, Takahiro	Dirac spectrum representation of Polyakov loop fluctuations in lattice QCD
15:00-15:20	GLOZMAN, Leonid	SU(4) symmetry of hadrons upon quasi-zero Dirac mode elimination.
15:20-15:40	BICUDO, Pedro	Gauge fixing and the gluon propagator in renormalizable xi gauges
15:40-16:00	CÈ, Marco	Non-Gaussianity of the topological charge distribution in SU(3) Yang-Mills theory
16:00-16:30	Coffee Break	
17 July (Fri) 404	Vacuum Structure and Confinement (Chair: Miho Koma)	
	Presenter	Title
16:30-16:50	MOLOCHKOV, Alexander	Study of non-perturbative contributions to surface operator within lattice gauge theory
16:50-17:10	SHIBATA, Akihiro	Abelian monopole or non-Abelian monopole responsible for quark confinement
17:10-17:30	BORNYAKOV, Vitaly	Gluon propagators near the phase transition in SU(2) gluodynamics
17:30-17:50	CUTERI, Francesca	Anatomy of SU(3) flux tubes at finite temperature
17:50-18:10	SUGANUMA, Hideo	The three-quark potential and perfect Abelian dominance in SU(3) lattice QCD

- **Room 405**

17 July (Fri) 405	Applications Beyond QCD (Chair: Eigo Shintani)	
	Presenter	Title
14:00-14:20	YAMAMOTO, Arata	Complex Langevin simulation in condensed matter physics
14:20-14:40	KIMURA, Taro	Domain-wall/overlap fermion and topological insulators
14:40-15:00	PUHR, Matthias	Chiral Magnetic Conductivity in an interacting lattice model of a parity-breaking Weyl semimetal
15:00-15:20	ULYBYSHEV, Maksim	Hybrid Monte Carlo simulations of graphene in external magnetic field
15:20-15:40	BOYDA, Denis	Numerical simulations of graphene conductivity with realistic inter-electron potential
15:40-16:00	ARAKI, Yasufumi	Lattice gauge theory treatment of strongly correlated Dirac semimetals
16:00-16:30	Coffee Break	
17 July (Fri) 405	Algorithms and Machines (Chair: Hideo Matsufuru)	
	Presenter	Title
16:30-16:50	CLARK, M	QUDA features, scaling and solvers
16:50-17:10	KOBAYASHI, Hirokazu	Optimization of Lattice QCD with CG and multi-shift CG on Intel Xeon Phi Coprocessor
17:10-17:30	SCHROECK, Mario	Accelerating twisted mass LQCD with QPhiX
17:30-17:50	NEMURA, Hidekatsu	An implementation of hybrid parallel CUDA code for the hyperonic nuclear forces
17:50-18:10	DOI, Jun	Early Performance Evaluation of Lattice QCD on POWER+GPU Cluster

- **Room 406**

17 July (Fri) 406	Weak Decays and Matrix Elements (Chair: Takashi Kaneko)	
	Presenter	Title
14:00-14:20	RIGGIO, Lorenzo	Kaon semileptonic form factors as functions of the momentum transfer with Nf=2+1+1 Twisted Mass fermions
14:20-14:40	LAWSON, Andrew	Long-distance contributions to the rare kaon decay K+ -> pi+ l+ l-
14:40-15:00	FENG, Xu	Long-distance contributions to the rare kaon decay K+ -> pi+ nu nu-bar
15:00-15:20	CHRIST, Norman	Computing the long-distance contributions to ϵ_K
15:20-15:40	SONI, Amarjit	Emerging lattice approach to K-Unitarity Triangle
16:00-16:30	Coffee Break	
17 July (Fri) 406	Weak Decays and Matrix Elements (Chair: James Simone)	
	Presenter	Title
16:30-16:50	KAWANAI, Taichi	Improving our determinations of the decay constant f_B and the $B\to\pi \ell \nu$ semi-leptonic form factors using physical light quarks
16:50-17:10	LIZARAZO, Edwin	Hadronic form factors for rare semi-leptonic B decays
17:10-17:30	WITZEL, Oliver	$B-\bar B$ mixing with domain-wall light quarks and relativistic b-quarks
17:30-17:50	GÉRARDIN, Antoine	Radial distributions of the axial density and the $B^{*\prime}B\pi$ coupling
17:50-18:10	SOMMER, Rainer	Controlling systematic errors in semi-leptonic B-decays

2.3.5 July 18 (Saturday) 9:00 – 11:00

- **Room 401**

18 July (Sat) 401	Nonzero Temperature and Density (Chair: Urs Heller)	
	Presenter	Title
9:00-9:20	COSSU, Guido	On the axial U(1) symmetry at finite temperature
9:20-9:40	TOMIYA, Akio	Study of the U(1)A symmetry restoration in two-flavor QCD at finite temperature with reweighed overlap fermions
9:40-10:00	SHARMA, Sayantan	The $U_A(1)$ anomaly in high temperature QCD with chiral fermions on the lattice
10:00-10:20	MAEZAWA, Yu	Thermal modification of mesons and restoration of broken symmetries from spatial correlation functions with HISQ
10:20-10:40	SATO, Tomomi	Footprint of non-decoupling in chiral phase transition
10:40-11:00	ISHII, Masahiro	Determination of U_A (1) restoration from meson screening masses by using the entanglement PNJL model: Toward chiral regime

- **Room 402**

18 July (Sat) 402	Theoretical developments (Chair: Goro Ishiki)	
	Presenter	Title
9:00-9:20	KAMATA, Norihiko	Lattice gradient flow with tree-level $O(a^4)$ improvement in pure Yang-Mills theory
9:20-9:40	CAPPONI, Francesco	Renormalization constants of the lattice energy momentum tensor using the gradient flow
9:40-10:00	ITOU, Etsuko	(2+1)-flavor QCD Thermodynamics from the Gradient Flow
10:00-10:20	SUZUKI, Hiroshi	Background field method in the gradient flow
10:20-10:40	KIKUCHI, Kengo	Generalized Gradient Flow Equation and Its Applications
10:40-11:00	EHRET, Susanne	The Wilson flow in scalar field theory

- **Room 403**

18 July (Sat) 403	Hadron Structure (Chair: Rajan Gupta)	
	Presenter	Title
9:00-9:20	SASTRE, Alfonso	Connected contribution to hadron correlation functions
9:20-9:40	TOTH, Balint	Disconnected contribution to hadron correlation functions
9:40-10:00	VAQUERO AVILÉS-CASCO, Alejandro	Disconnected quark loop contributions to nucleon observables using $N_f=2$ twisted clover fermions at a physical value of the light quark mass
10:00-10:20	HARRIS, Tim	Exploring the effects of open boundary conditions on baryonic observables
10:20-10:40	SCHILLER, Arwed	Improving the lattice axial vector current
10:40-11:00	VON HIPPEL, Georg	A systematic study of excited-state effects on nucleon axial form factors

- **Room 404**

18 July (Sat) 404	Applications Beyond QCD (Chair: Yasufumi Araki)	
	Presenter	Title
9:00-9:20	BAZAVOV, Alexei	Effective action for the Abelian Higgs model for a gauge-invariant implementation on optical lattices
9:20-9:40	KEEGAN, Liam	Schwinger Model Mass Anomalous Dimension
9:40-10:00	SHIMIZU, Yuya	Study of the continuum limit of the Schwinger model using Wilson's lattice formulation
10:00-10:20	SCHMIDT, Daniel	Critical flavour number of the Thirring model in three dimensions
10:20-10:40	KANAZAWA, Takuya	Asymptotically free lattice gauge theory in five dimensions
10:40-11:00	MONAHAN, Christopher	The gradient flow in simple field theories

- **Room 405**

18 July (Sat) 405	Physics Beyond the Standard Model (Chair: Noboru Kawamoto)	
	Presenter	Title
9:00-9:20	PIEMONTE, Stefano	Witten index and phase diagram of compactified N=1 supersymmetric Yang-Mills theory on the lattice
9:20-9:40	GIUDICE, Pietro	Supermultiplets of the N=1 supersymmetric Yang-Mills theory in the continuum limit
9:40-10:00	WENGER, Urs	Canonical simulations of supersymmetric SU(N) Yang-Mills quantum mechanics
10:00-10:20	SCHAICH, David	New results from lattice N=4 supersymmetric Yang--Mills
10:20-10:40	ITO, Yuta	Large-scale computation of the exponentially expanding universe in a simplified Lorentzian IIB matrix model
10:40-11:00	FORINI, Valentina	Lattice and string worldsheet in AdS/CFT: a numerical study

- **Room 406**

18 July (Sat) 406	Nonzero Temperature and Density (Chair: Christof Gattringer)	
	Presenter	Title
9:00-9:20	NADA, Alessandro	Hagedorn spectrum and equation of state of Yang-Mills theories
9:20-9:40	ICHIHARA, Terukazu	Higher order net baryon number cumulants in the strong coupling lattice QCD
9:40-10:00	HÖLLWIESER, Roman	Polyakov line actions from SU(3) lattice gauge theory with dynamical fermions: first results via relative weights
10:00-10:20	SCIOR, Philipp	Effective Polyakov loop models for QCD-like theories at finite chemical potential
10:20-10:40	WELLEGEHAUSEN, Bjoern	G(2)-QCD at finite temperature and density
10:40-11:00	KAMIKADO, Kazuhiko	Phase diagram of the U(2)xU(2) scalar model in three dimensions

- **Parallel talks at a glance**

Presenter	Date Room	Time	Title
AKERLUND, Oscar	15 July (Wed) 405	16:30-16:50	Effects of higher order operators on the Standard Model Higgs sector
ALEXANDRU, Andrei	16 July (Thu) 404	9:50-10:10	Boundary effects on the chiral condensate from Lattice QCD
ALLTON, Chris	17 July (Fri) 401	17:30-17:50	Nucleons and parity doubling across the deconfinement transition
AMATO, Alessandro	17 July (Fri) 402	14:40-15:00	Topology and glueballs in $SU(7)$ Yang-Mills with open boundary conditions
AOKI, Sinya	17 July (Fri) 402	17:30-17:50	Encoding field theories into gravities
ARAKI, Yasufumi	17 July (Fri) 405	15:40-16:00	Lattice gauge theory treatment of strongly correlated Dirac semimetals
ATHENODOROU, Andreas	16 July (Thu) 403	11:00-11:20	The electric dipole moment of the neutron from N_f=2+1+1 twisted mass fermions
ATTANASIO, Felipe	15 July (Wed) 401	14:20-14:40	Towards the heavy dense QCD phase diagram using Complex Langevin simulations
AYYAR, Venkit	16 July (Thu) 404	8:30-8:50	Exotic Quantum Critical Points with Staggered Fermions
BAER, Oliver	15 July (Wed) 403	17:50-18:10	Nucleon-pion-state contributions in the determination of the nucleon axial charge
BANERJEE, Debasish	15 July (Wed) 406	16:50-17:10	Real-time simulation of dissipation-driven quantum Systems
BAZAVOV, Alexei	18 July (Sat) 404	9:00-9:20	Effective action for the Abelian Higgs model for a gauge-invariant implementation on optical lattices
BENNETT, Ed	14 July (Tue) 405	14:20-14:40	Topological observables in many-flavour QCD
BERGNER, Georg	15 July (Wed) 405	15:00-15:20	Lattice simulations of technicolour theories with adjoint fermions and supersymmetric Yang-Mills theory
BERKOWITZ, Evan	16 July (Thu) 405	9:10-9:30	Lattice QCD and Axion Cosmology
BERLIN, Joshua	16 July (Thu) 402	9:50-10:10	Computation of correlation matrices for tetraquark candidates with $J^P = 0^+$ and flavor structure $q_1 ¥bar{q_2} q_3 ¥bar{q}_3$
BHATTACHARYA, Tanmoy	16 July (Thu) 405	9:50-10:10	Neutron EDM from quark chromoEDM
BICUDO, Pedro	17 July (Fri) 404	15:20-15:40	Gauge fixing and the gluon propagator in renormalizable xi gauges
BLOCH, Jacques	15 July (Wed) 401	15:40-16:00	Complex Langevin in low-dimensional QCD: the good and the not-so-good
BORNYAKOV, Vitaly	17 July (Fri) 404	17:10-17:30	Gluon propagators near the phase transition in SU(2) gluodynamics
BOYDA, Denis	17 July (Fri) 405	15:20-15:40	Numerical simulations of graphene conductivity with realistic inter-electron potential
BOYLE, Peter	14 July (Tue) 406	15:20-15:40	A next generation C++ library for data parallel QCD
BRAMBILLA, Michele	15 July (Wed) 404	17:50-18:10	Clover fermions in Numerical Stochastic Perturbation Theory
BRANDT, Bastian	15 July (Wed) 404	15:40-16:00	QCD spectroscopy and quark mass renormalisation in external magnetic fields with Wilson fermions
BROWER, Richard	17 July (Fri) 402	16:30-16:50	Lattice Conformal Field Theory on the Reimann Sphere
BUIVIDOVICH, Pavel	17 July (Fri) 402	15:00-15:20	Diagrammatic Monte-Carlo algorithms for large-N quantum field theories from Schwinger-Dyson equations
BULAVA, John	14 July (Tue) 402	14:20-14:40	Large volume calculation of pion-pion scattering phase shifts with the stochastic LapH method on an $N_f=2+1$ anisotropic clover lattice
BUSSONE, Andrea	14 July (Tue) 406	14:40-15:00	Fermionic twisted boundary conditions with reweighting method
BUYENS, Boye	15 July (Wed) 406	16:30-16:50	Hamiltonian simulation of lattice gauge theories
CAN, Utku	16 July (Thu) 403	11:40-12:00	Electromagnetic structure of the charmed baryons - extended to spin-3/2
CAPPONI, Francesco	18 July (Sat) 402	9:20-9:40	Renormalization constants of the lattice energy momentum tensor using the gradient flow

CÈ, Marco	17 July (Fri) 404	15:40-16:00	Non-Gaussianity of the topological charge distribution in SU(3) Yang-Mills theory
CHAKRABORTY, Bipasha	14 July (Tue) 403	15:40-16:00	Lattice calculation of the HVP contribution to the anomalous magnetic moment of muon
CHEN, Ying	14 July (Tue) 402	15:20-15:40	The mass and leptonic decay constant of rho meson at the physical point
CHIK HIM, Wong	14 July (Tue) 405	16:50-17:10	Hadron Spectroscopy with a low-mass composite scalar in the sextet model
CHRIST, Norman	17 July (Fri) 406	15:00-15:20	Computing the long-distance contributions to ϵ_K
CHU, David Y. -j.	15 July (Wed) 405	16:50-17:10	Lattice study of the Higgs-Yukawa model in and beyond the Standard Model
CICHY, Krzysztof	16 July (Thu) 402	8:50-9:10	Mass spectrum of mesons containing charm quarks - continuum limit results from twisted mass fermions
CLARK, M	17 July (Fri) 405	16:30-16:50	QUDA features, scaling and solvers
COLQUHOUN, Brian	16 July (Thu) 406	9:50-10:10	Phenomenology with Lattice NRQCD b Quarks.
COSMAI, Leonardo	14 July (Tue) 401	14:40-15:00	Curvature of the pseudocritical line in (2+1)-flavor QCD with HISQ fermions
COSSU, Guido	18 July (Sat) 401	9:00-9:20	On the axial U(1) symmetry at finite temperature
CUTERI, Francesca	17 July (Fri) 404	17:30-17:50	Anatomy of SU(3) flux tubes at finite temperature
CZABAN, Christopher	14 July (Tue) 401	16:50-17:10	The nature of the Roberge-Weiss Transition in N_f=2 QCD with Wilson Fermions on N_t=6 lattices
DALLA BRIDA, Mattia	14 July (Tue) 404	15:40-16:00	The chirally rotated Schroedinger functional at work
DE FORCRAND, Philippe	16 July (Thu) 401	9:50-10:10	Aspects of topological actions on the lattice
DETAR, Carleton	16 July (Thu) 406	8:50-9:10	Decay constants f_B and f_{B_s} from HISQ simulations
DETMOLD, William	15 July (Wed) 402	14:00-14:20	Magnetic properties of light nuclei and the $n p ¥to d ¥gamma$ transition
DI RENZO, Francesco	17 July (Fri) 403	15:20-15:40	Thimble regularization at work for Gauge Theories: from toy models onwards.
DING, Heng-tong	15 July (Wed) 401	17:10-17:30	Chiral phase transition of N_f=3 and 2+1 QCD at vanishing baryon chemical potential
DOI, Jun	17 July (Fri) 405	17:50-18:10	Early Performance Evaluation of Lattice QCD on POWER+GPU Cluster
DOI, Takahiro	17 July (Fri) 404	14:40-15:00	Dirac spectrum representation of Polyakov loop fluctuations in lattice QCD
DOI, Takumi	15 July (Wed) 402	16:30-16:50	First results of baryon interactions from lattice QCD with physical masses (1) -- General overview and two-nucleon forces
DONALD, Gordon	14 July (Tue) 402	15:00-15:20	K-pi and pi-pi scattering close to the physical pion mass
DRACH, Vincent	16 July (Thu) 405	8:30-8:50	Template Composite Dark Matter : SU(2) gauge theory with Nf=2
DRAGOS, Jack	14 July (Tue) 406	17:30-17:50	Improved Hadronic Matrix Element Determination Using the Variational Method
DROMARD, Arthur	15 July (Wed) 406	15:20-15:40	Combining ordinary and topological finite volume effects for fixed topology simulations
EHRET, Susanne	18 July (Sat) 402	10:40-11:00	The Wilson flow in scalar field theory
ENDRES, Michael	14 July (Tue) 402	17:50-18:10	Photon mass term as an IR regularization for QCD+QED on the lattice
ENGELHARDT, Michael	15 July (Wed) 403	14:40-15:00	Lattice QCD calculations of nucleon transverse momentum-dependent parton distributions (TMDs) at 170 MeV pion mass
ERUZZI, Giovanni	17 July (Fri) 403	15:00-15:20	Thimble regularization at work besides toy models: from Random Matrix Theory to Gauge Theories.
FAHY, Brendan	14 July (Tue) 402	16:30-16:50	Decay constants and spectroscopy of mesons in lattice QCD using domain-wall fermions

FENG, Xu	17 July (Fri) 406	14:40-15:00	Long-distance contributions to the rare kaon decay K+ -> pi+ nu nu-bar
FLEMING, George	17 July (Fri) 402	16:50-17:10	Scalar field theory on a 2-sphere using quantum finite element method (QFEM)
FORINI, Valentina	18 July (Sat) 405	10:40-11:00	Lattice and string worldsheet in AdS/CFT: a numerical study
FRISON, Julien	15 July (Wed) 404	14:40-15:00	Nf=2+1+1 renormalisation of four-quark operators
FRITZSCH, Patrick	14 July (Tue) 404	14:20-14:40	Prospects and status of quark mass renormalization in three-flavour QCD
FUKAYA, Hidenori	14 July (Tue) 402	17:30-17:50	Extracting the eta-prime meson mass from gluonic correlators in lattice QCD
FUKUDA, Ryutaro	16 July (Thu) 401	9:10-9:30	Validity range of canonical approach to finite density QCD
GASBARRO, Andrew	17 July (Fri) 402	17:10-17:30	Spherical Finite Elements for Lattice Radial Quantization
GATTRINGER, Christof	17 July (Fri) 403	17:50-18:10	Dual representation for massless fermions with chemical potential and U(1) gauge fields
GÉRARDIN, Antoine	17 July (Fri) 406	17:30-17:50	Radial distributions of the axial density and the $B^{*\prime}B\pi$ coupling
GIUDICE, Pietro	18 July (Sat) 405	9:20-9:40	Supermultiplets of the N=1 supersymmetric Yang-Mills theory in the continuum limit
GIULIANI, Mario	17 July (Fri) 403	17:30-17:50	Density of states approach with FFA for an effective Polyakov loop model at finite density
GLESAAEN, Jonas Rylund	16 July (Thu) 401	11:40-12:00	Analytic computations of an effective lattice theory for heavy quarks
GLOZMAN, Leonid	17 July (Fri) 404	15:00-15:20	SU(4) symmetry of hadrons upon quasi-zero Dirac mode elimination.
GOLTERMAN, Maarten	14 July (Tue) 403	17:30-17:50	Finite volume effects in hadronic vacuum polarization
GOTTLIEB, Steven	14 July (Tue) 404	18:10-18:30	Electromagnetic effects on the light pseudoscalar mesons and determination of m_u/m_d
GREEN, Jeremy	14 July (Tue) 403	16:30-16:50	Direct calculation of hadronic light-by-light scattering
GREGORY, Eric	14 July (Tue) 403	17:50-18:10	A derivative based approach for the leading order hadronic contribution to g-2 of the muon
GUELPERS, Vera	15 July (Wed) 404	15:00-15:20	The leading hadronic contribution to $¥gamma$-Z mixing
GUENTHER, Jana	14 July (Tue) 401	14:20-14:40	The curvature of the crossover line in the (T, mu)-phase diagram of QCD
GUO, Dehua	14 July (Tue) 402	15:40-16:00	Resonance Parameters for the rho-meson from Lattice QCD
GUPTA, Rajan	16 July (Thu) 403	10:40-11:00	Nucleon charges, form-factors and neutron EDM
HANSEN, Martin	14 July (Tue) 405	17:50-18:10	Conformal symmetry vs. chiral symmetry breaking in the SU(3) sextet model
HARRIS, Tim	18 July (Sat) 403	10:00-10:20	Exploring the effects of open boundary conditions on baryonic observables
HASEGAWA, Masayasu	17 July (Fri) 404	14:00-14:20	Chiral symmetry breaking, instantons, and monopoles
HAYAKAWA, Masashi	14 July (Tue) 403	14:20-14:40	On calculating disconnected-type hadronic light-by-light scattering diagrams from lattice QCD
HEGDE, Prasad	14 July (Tue) 401	14:00-14:20	The curvature of the chiral phase transition line at small values of the quark chemical potentials
HERDOIZA, Gregorio	14 July (Tue) 403	16:50-17:10	Study of the hadronic contributions to the running of the QED coupling
HÖLLWIESER, Roman	18 July (Sat) 406	9:40-10:00	Polyakov line actions from SU(3) lattice gauge theory with dynamical fermions: first results via relative weights
HORCH, Hanno	14 July (Tue) 403	17:10-17:30	The hadronic vacuum polarization function with O(a)-improved Wilson fermions - an update
HORSLEY, Roger	15 July (Wed) 404	15:20-15:40	Determining the scale in Lattice QCD

HORVATH, Ivan	17 July (Fri) 404	14:20-14:40	Classifying the phases of gauge theories by spectral density of probing chiral quarks
HÖRZ, Ben	14 July (Tue) 402	14:00-14:20	Pion-pion interaction from N_f = 2+1 simulations using the stochastic LapH method
HUDSPITH, Renwick	14 July (Tue) 406	17:10-17:30	Neutral Kaon mixing beyond the Standard Model
ICHIHARA, Terukazu	18 July (Sat) 406	9:20-9:40	Higher order net baryon number cumulants in the strong coupling lattice QCD
IKEDA, Atsuro	17 July (Fri) 401	14:40-15:00	Transverse and longitudinal spectral functions of charmonia at finite temperature with maximum entropy method
IKEDA, Yoichi	15 July (Wed) 402	18:10-18:30	Zc(3900) from coupled-channel HAL QCD approach on the lattice
IRITANI, Takumi	15 July (Wed) 402	17:30-17:50	Lattice QCD studies of baryon interactions from HAL QCD method and Luscher's finite volume method
ISHII, Masahiro	18 July (Sat) 401	10:40-11:00	Determination of U_A (1) restoration from meson screening masses by using the entanglement PNJL model: Toward chiral regime
ISHII, Noriyoshi	15 July (Wed) 402	16:50-17:10	First results of baryon interaction from lattice QCD with physical masses (2) -- S=-3 and S=-4 sectors (XiXi, XiSigma, XiLambda-XiSigma channels) --
ISHIKAWA, Tomomi	16 July (Thu) 406	8:30-8:50	Neutral B meson mixings and B meson decay constants in the infinite b quark mass limit with domain-wall light quarks
ISHIKI, Goro	17 July (Fri) 402	15:40-16:00	Matrix Geometry and Coherent States
ITO, Yuta	18 July (Sat) 405	10:20-10:40	Large-scale computation of the exponentially expanding universe in a simplified Lorentzian IIB matrix model
ITOU, Etsuko	18 July (Sat) 402	9:40-10:00	(2+1)-flavor QCD Thermodynamics from the Gradient Flow
IVANOV, Aleksandr	15 July (Wed) 406	14:20-14:40	Convergent Perturbation Theory for ϕ^4 model on lattice
IWAMI, Ryo	14 July (Tue) 401	15:40-16:00	Many flavor approach to study the critical point in finite density QCD
JAEGER, Benjamin	15 July (Wed) 401	14:40-15:00	Insights into the heavy dense QCD phase diagram using Complex Langevin simulations
JANOWSKI, Tadeusz	14 July (Tue) 402	14:40-15:00	K-pi scattering lengths from physical point ensembles
JIN, Luchang	14 July (Tue) 403	14:00-14:20	Hadronic Light by Light Contributions to the Muon Anomalous Magnetic Moment With Near Physical Pions
JUNG, Chulwoo	14 July (Tue) 406	14:20-14:40	zMobius and other recent developments on Domain Wall Fermions
JUNNARKAR, Parikshit	15 July (Wed) 402	14:40-15:00	The H-dibaryon in two flavor lattice QCD
KAMATA, Norihiko	18 July (Sat) 402	9:00-9:20	Lattice gradient flow with tree-level $O(a^4)$ improvement in pure Yang-Mills theory
KAMATA, Syo	17 July (Fri) 403	15:40-16:00	Application of the Lefschetz thimble formulation to the (0+1) dimensional Thirring model at finite density
KAMIKADO, Kazuhiko	18 July (Sat) 406	10:40-11:00	Phase diagram of the U(2)xU(2) scalar model in three dimensions
KANAZAWA, Takuya	18 July (Sat) 404	10:20-10:40	Asymptotically free lattice gauge theory in five dimensions
KANEKO, Takashi	14 July (Tue) 406	16:30-16:50	Chiral behavior of light meson form factors in 2+1 flavor QCD with exact chiral symmetry
KASHIWA, Kouji	14 July (Tue) 401	17:50-18:10	Topological feature and phase diagram of QCD at complex chemical potential
KAWAMOTO, Noboru	17 July (Fri) 402	17:50-18:10	Summary of Super Doubler Approach on Exact Lattice Supersymmetry
KAWANAI, Taichi	17 July (Fri) 406	16:30-16:50	Improving our determinations of the decay constant f_B and the $B\to\pi \ell \nu$ semi-leptonic form factors using physical light quarks
KAWAUCHI, Hikaru	15 July (Wed) 406	17:50-18:10	Tensor renormalization group analysis of CP(N-1) model in two dimensions
KEEGAN, Liam	18 July (Sat) 404	9:20-9:40	Schwinger Model Mass Anomalous Dimension
KENNEDY, Anthony	15 July (Wed) 406	14:00-14:20	Renormalizability of the Schdinger Functional.

KHAMSEH, Ava	16 July (Thu) 406	11:00-11:20	Neutral D-Meson Mixing near the Charm Mass
KIKUCHI, Kengo	18 July (Sat) 402	10:20-10:40	Generalized Gradient Flow Equation and Its Applications
KIM, Seyong	17 July (Fri) 401	14:00-14:20	Lattice NRQCD study of quarkonium at non-zero temperature
KIMURA, Taro	17 July (Fri) 405	14:20-14:40	Domain-wall/overlap fermion and topological insulators
KITAZAWA, Masakiyo	15 July (Wed) 401	17:30-17:50	Thermodynamics and reference scale of SU(3) gauge theory from gradient flow on fine lattices
KNECHTLI, Francesco	14 July (Tue) 404	17:10-17:30	Perturbative versus non-perturbative decoupling of heavy quarks
KOBAYASHI, Hirokazu	17 July (Fri) 405	16:50-17:10	Optimization of Lattice QCD with CG and multi-shift CG on Intel Xeon Phi Coprocessor
KONDO, Kei-ichi	17 July (Fri) 401	15:40-16:00	Confinement/deconfinement transition temperature from the Polyakov loop potential and gauge-invariant gluon mass
KOPONEN, Jonna	15 July (Wed) 403	16:30-16:50	Pion electromagnetic form factor from full lattice QCD
KORCYL, Piotr	14 July (Tue) 404	16:30-16:50	Non-perturbative renormalization of the static quark theory in a large volume
KOTOV, Andrey	17 July (Fri) 403	14:00-14:20	Two-Color Lattice QCD with Non-zero Chiral Chemical Potential
KURACHI, Masafumi	14 July (Tue) 405	14:40-15:00	SU(3) gauge theory with four degenerate fundamental fermions on the lattice
KURTH, Thorsten	14 July (Tue) 406	17:50-18:10	Nuclear Parity Violation from Lattice QCD
KUTAK, Krzysztof	16 July (Thu) 403	8:50-9:10	Gluon saturation and gluon densities
KUTI, Julius	14 July (Tue) 405	16:30-16:50	A minimal model of the composite Higgs and its Goldstone dynamics
LAMBROU, Eliana	15 July (Wed) 405	17:30-17:50	Five-dimensional Gauge Theories in a Warped Background
LAMI, Paolo	15 July (Wed) 404	14:20-14:40	Scalar and vector form factors of $D ¥to ¥pi ¥ell ¥nu$ decays with $N_f=2+1+1$ Twisted fermions
LAWSON, Andrew	17 July (Fri) 406	14:20-14:40	Long-distance contributions to the rare kaon decay K+ -> pi+ l+ l-
LEHNER, Christoph	14 July (Tue) 403	14:40-15:00	Improving the volume-dependence of lattice QCD+QED simulations
LEINO, Viljami	15 July (Wed) 405	14:40-15:00	Gradient flow and IR fixed point in SU(2) with Nf=8 flavors
LEWIS, Randy	15 July (Wed) 404	17:10-17:30	Determining the QCD coupling from lattice vacuum polarization
LIN, C.-j. David	15 July (Wed) 405	14:00-14:20	Lattice study for conformal windows of SU(2) and SU(3) gauge theories with fundamental fermions
LIN, Meifeng	14 July (Tue) 406	15:00-15:20	Optimizing the domain wall fermion Dirac operator using the R-Stream source-to-source compiler
LIU, Keh-fei	15 July (Wed) 403	14:00-14:20	Parton Distribution Function from Hadronic Tensor
LIZARAZO, Edwin	17 July (Fri) 406	16:50-17:10	Hadronic form factors for rare semi-leptonic B decays
LOHMAYER, Robert	15 July (Wed) 406	14:40-15:00	Induced YM theory with auxiliary bosons
LYTLE, Andrew	14 July (Tue) 404	17:50-18:10	NPR determination of quark masses from the HISQ action
MADANAGOPALAN, Padmanath	16 July (Thu) 402	8:30-8:50	X(3872) and Y(4140) using diquark-antidiquark operators with lattice QCD
MAEZAWA, Yu	18 July (Sat) 401	10:00-10:20	Thermal modification of mesons and restoration of broken symmetries from spatial correlation functions with HISQ
MAGES, Simon	15 July (Wed) 401	18:10-18:30	Pure SU(3) Topological Susceptibility at Finite Temperature with the Wilson Flow
MALTMAN, Kim	15 July (Wed) 404	14:00-14:20	Lattice input on the tau V_us puzzle

MARINKOVIC, Marina	14 July (Tue) 403	18:10-18:30	Leading isospin breaking correction to the hadronic vacuum polarisation
MARITI, Marco	15 July (Wed) 401	16:30-16:50	Magnetic properties and deconfinement
MAWHINNEY, Robert	16 July (Thu) 404	11:00-11:20	NLO and NNLO Low Energy Constants for SU(3) Chiral Perturbation Theory
MCGLYNN, Greg	14 July (Tue) 406	14:00-14:20	Algorithmic improvements for weak coupling simulations of domain wall fermions
MESITI, Michele	14 July (Tue) 401	15:00-15:20	Curvature of the QCD chiral peusdocritical line from analytic continuation
MEURICE, Yannick	15 July (Wed) 406	18:10-18:30	Approaching conformality with the Tensor Renormalization Group method
MEYER, Florian	17 July (Fri) 401	16:50-17:10	Thermal dilepton rates and electrical conductivity of the QGP
MISUMI, Tatsuhiro	14 July (Tue) 401	18:10-18:30	Finite-temperature phase transition of Nf=3 QCD with exact center symmetry
MIYAMOTO, Takaya	15 July (Wed) 402	17:50-18:10	Lambda_c-N interaction from lattice QCD
MOIR, Graham	15 July (Wed) 405	17:10-17:30	Non-Perturbative Gauge-Higgs Unification in Five Dimensions
MOLOCHKOV, Alexander	17 July (Fri) 404	16:30-16:50	Study of non-perturbative contributions to surface operator within lattice gauge theory
MONAHAN, Christopher	18 July (Sat) 404	10:40-11:00	The gradient flow in simple field theories
MONDAL, Santanu	14 July (Tue) 405	17:10-17:30	Taste symmetry restoration in the sextet model with staggered fermions
MURPHY, David	16 July (Thu) 404	10:40-11:00	NLO and NNLO Low Energy Constants for SU(2) Chiral Perturbation Theory
NADA, Alessandro	18 July (Sat) 406	9:00-9:20	Hagedorn spectrum and equation of state of Yang-Mills theories
NAGATA, Keitaro	15 July (Wed) 401	15:00-15:20	Testing a generalized cooling procedure in the complex Langevin simulation of chiral Random Matrix Theory
NAKAMURA, Yoshifumi	15 July (Wed) 401	16:50-17:10	Towards the continuum limit of the critical endline of finite temperature QCD
NAKAYAMA, Katsumasa	15 July (Wed) 404	16:50-17:10	Charmonium current-current correlators with Mobius domain-wall fermion
NAKAYAMA, Yu	14 July (Tue) 405	15:40-16:00	IR fixed points and conformal window in $SU(3)$ gauge Theories
NEMURA, Hidekatsu	17 July (Fri) 405	17:30-17:50	An implementation of hybrid parallel CUDA code for the hyperonic nuclear forces
NICHOLSON, Amy	15 July (Wed) 402	15:00-15:20	Two-nucleon scattering in multiple partial waves
NIKOLAEV, Alexander	17 July (Fri) 403	14:20-14:40	Lattice simulation of QC_2D with $N_f=2$ at non-zero baryon density
NISHIGAKI, Shinsuke	16 July (Thu) 404	8:50-9:10	Distribution of the k-th smallest Dirac operator eigenvalue : an update
NOGRADI, Daniel	14 July (Tue) 405	17:30-17:50	Running coupling of the sextet composite Higgs model
OHKI, Hiroshi	14 July (Tue) 405	14:00-14:20	Walking and conformal dynamics in many flavor QCD
OHNISHI, Akira	17 July (Fri) 403	16:30-16:50	Preweighting method in Monte-Carlo sampling with complex action
OHNO, Hiroshi	17 July (Fri) 401	14:20-14:40	Charmonia and bottomonia at finite temperature on large quenched lattice
OHTA, Shigemi	15 July (Wed) 403	18:10-18:30	Some nucleon isovector obsesrvables from 2+1-flavor domain-wall QCD at physical mass
OKA, Shotaro	16 July (Thu) 401	8:50-9:10	Exploring finite density QCD phase transition with canonical approach - Power of multiple precision computation -
OKAWA, Masanori	17 July (Fri) 402	14:20-14:40	Large N meson propagators from twisted space-time reduced model
OSBORN, James	16 July (Thu) 402	11:00-11:20	Flavor Filtered Fermions

OTTNAD, Konstantin	16 July (Thu) 404	11:40-12:00	Testing the Witten-Veneziano Formula on the Lattice
PAK, Markus	16 July (Thu) 404	11:20-11:40	Evidence for a new SU(4) symmetry with J=2 mesons
PARK, Sungwoo	14 July (Tue) 404	17:30-17:50	Nonperturbative renormalization in the RI-SMOM scheme and Gribov copies for staggered bilinears
PASZTOR, Attila	17 July (Fri) 401	15:20-15:40	Static quark-antiquark pair free energy and screening masses: continuum results at the QCD physical point
PATELLA, Agostino	16 July (Thu) 402	11:20-11:40	Charged particles in QED with C* boundary conditions I
PELLEGRINI, Roberto	17 July (Fri) 403	16:50-17:10	The density of states approach at finite chemical potential: a numerical study of the Bose gas.
PETERS, Antje	16 July (Thu) 402	9:30-9:50	Exploring possibly existing qq-anti-b-anti-b tetraquark states with qq = ud, ss, cc
PETSCHLIES, Marcus	15 July (Wed) 402	15:20-15:40	Calculation of the decay width of decuplet baryons
PHILIPSEN, Owe	16 July (Thu) 401	11:20-11:40	Heavy and dense QCD from an effective lattice theory
PIEMONTE, Stefano	18 July (Sat) 405	9:00-9:20	Witten index and phase diagram of compactified N=1 supersymmetric Yang-Mills theory on the lattice
PINKE, Christopher	14 July (Tue) 401	17:10-17:30	The $N_f=2$ chiral phase transition from imaginary chemical potential with Wilson Fermions
PORTELLI, Antonin	14 July (Tue) 403	15:20-15:40	Finite volume hadronic vacuum polarisation at arbitrary momenta
PRAKI, Chrisanthi	17 July (Fri) 401	17:10-17:30	Calculation of free baryon spectral densities at finite temperature
PRETI, David	14 July (Tue) 404	14:40-15:00	Non-perturbative renormalization of tensor bilinears in Schrodinger Functional schemes
PRIMER, Thomas	16 July (Thu) 406	11:40-12:00	D meson semileptonic form factors at zero momentum transfer in 2+1+1 flavor lattice QCD
PUHR, Matthias	17 July (Fri) 405	14:40-15:00	Chiral Magnetic Conductivity in an interacting lattice model of a parity-breaking Weyl semimetal
RAE, Thomas	16 July (Thu) 402	9:10-9:30	Ground state charmed meson spectra for $N_f=2+1+1$
RAKOW, Paul	14 July (Tue) 402	18:10-18:30	Dashen's theorem and electromagnetic contributions to pseudoscalar meson masses
RAMOS, Alberto	17 July (Fri) 402	14:00-14:20	(Dimensional) twisted reduction in large N gauge theories
RANTAHARJU, Jarno	15 July (Wed) 405	15:20-15:40	Wilson Fermions with Four Fermion Interactions
REBBI, Claudio	14 July (Tue) 405	15:00-15:20	Studying near conformal behavior with four light flavors and eight flavors of variable mass.
RIGGIO, Lorenzo	17 July (Fri) 406	14:00-14:20	Kaon semileptonic form factors as functions of the momentum transfer with Nf=2+1+1 Twisted Mass fermions
RINALDI, Enrico	16 July (Thu) 405	8:50-9:10	Stealth Dark Matter on the lattice
RINDLISBACHER, Tobias	16 July (Thu) 401	11:00-11:20	Lattice simulation of the SU(2)-chiral model at zero and non-zero pion density
ROEDL, Rudolf	15 July (Wed) 403	15:00-15:20	Nucleon generalized form factors from lattice QCD with nearly physical quark masses
ROTTMANN, Matthias	16 July (Thu) 405	10:40-11:00	A Multigrid Based Eigensolver for the Hermitian Wilson Dirac Operator
RUMMUKAINEN, Kari	15 July (Wed) 405	17:50-18:10	Gravitational waves from cosmological first order phase transitions
RUSETSKY, Akaki	15 July (Wed) 406	15:40-16:00	Three particles in a finite volume
SACHRAJDA, Christopher	14 July (Tue) 406	16:50-17:10	QED Corrections to Hadronic Processes in Lattice QCD
SAITO, Hana	15 July (Wed) 406	17:30-17:50	Thermal evolution of the 1-flavour Schwinger model with using Matrix Product States
SASAKI, Kenji	15 July (Wed) 402	17:10-17:30	First results of baryon interactions from lattice QCD with physical masses (3) -- Strangeness S=-2 two-baryon system

SASAKI, Shoichi	15 July (Wed) 403	16:50-17:10	SU(3)-breaking effects and induced second-class form factors in hyperon beta decays from 2+1 flavor lattice QCD
SASTRE, Alfonso	18 July (Sat) 403	9:00-9:20	Connected contribution to hadron correlation functions
SATO, Tomomi	18 July (Sat) 401	10:20-10:40	Footprint of non-decoupling in chiral phase transition
SCHADLER, Hans-peter	15 July (Wed) 401	17:50-18:10	Polyakov loop renormalization with gradient flow
SCHAEFER, Stefan	14 July (Tue) 404	15:00-15:20	Scale determination for the CLS 2+1 ensembles
SCHAICH, David	18 July (Sat) 405	10:00-10:20	New results from lattice N=4 supersymmetric Yang--Mills
SCHIERHOLZ, Gerrit	15 July (Wed) 404	17:30-17:50	Light quark masses from infrared fixed point
SCHILLER, Arwed	18 July (Sat) 403	10:20-10:40	Improving the lattice axial vector current
SCHMIDT, Daniel	18 July (Sat) 404	10:00-10:20	Critical flavour number of the Thirring model in three dimensions
SCHROECK, Mario	17 July (Fri) 405	17:10-17:30	Accelerating twisted mass LQCD with QPhiX
SCIOR, Philipp	18 July (Sat) 406	10:00-10:20	Effective Polyakov loop models for QCD-like theories at finite chemical potential
SHARMA, Sayantan	18 July (Sat) 401	9:40-10:00	The $U_A(1)$ anomaly in high temperature QCD with chiral fermions on the lattice
SHIBATA, Akihiro	17 July (Fri) 404	16:50-17:10	Abelian monopole or non-Abelian monopole responsible for quark confinement
SHIMASAKI, Shinji	15 July (Wed) 401	15:20-15:40	Understanding the problem with logarithmic singularities in the complex Langevin method
SHIMIZU, Yuya	18 July (Sat) 404	9:40-10:00	Study of the continuum limit of the Schwinger model using Wilson's lattice formulation
SHINDLER, Andrea	16 July (Thu) 405	9:30-9:50	Beyond the Standard model matrix elements with the gradient flow
SHINTANI, Eigo	15 July (Wed) 403	17:30-17:50	High statistic analysis of nucleon form factors and charges in lattice QCD
SHU, Hai-tao	17 July (Fri) 401	16:30-16:50	A stochastic approach to the reconstruction of spectral functions in lattice QCD
SIMETH, Jakob	16 July (Thu) 405	11:00-11:20	Multigrid-accelerated Low-Mode Averaging
SIMONE, James	16 July (Thu) 406	9:10-9:30	Neutral B-meson and D-meson mixing bag parameters from $2+1$ flavor lattice QCD
SINCLAIR, D. K.	15 July (Wed) 401	14:00-14:20	Exploring Complex-Langevin Methods for Finite-Density QCD
SINT, Stefan	14 July (Tue) 404	14:00-14:20	A status update on the ALPHA collaboration's project to determine the Lambda-parameter in 3-flavour QCD
SOELDNER, Wolfgang	14 July (Tue) 402	17:10-17:30	Latest Results from RQCD using 2+1f CLS Simulations with Open Boundaries
SOMMER, Rainer	17 July (Fri) 406	17:50-18:10	Controlling systematic errors in semi-leptonic B-decays
SONI, Amarjit	17 July (Fri) 406	15:20-15:40	Emerging lattice approach to K-Unitarity Triangle
SPRAGGS, Matt	14 July (Tue) 403	15:00-15:20	The strange contribution to the anomalous magnetic moment of the muon with physical quark masses using Mebius domain wall fermions
STRELCHENKO, Alexei	16 July (Thu) 405	11:40-12:00	Accelerating deflation of eigenvalues for fermion matrix inversions on GPUs
SUGANUMA, Hideo	17 July (Fri) 404	17:50-18:10	The three-quark potential and perfect Abelian dominance in SU(3) lattice QCD
SUN, Mingyang	15 July (Wed) 402	15:40-16:00	The Roper resonance from spatially large interpolation fields
SUNO, Hiroya	16 July (Thu) 405	11:20-11:40	Eigenspectrum calculation of the non-Hermitian O(a)-improved Wilson-Dirac operator using the Sakurai-Sugiura method
SUZUKI, Asobu	16 July (Thu) 401	9:30-9:50	Calculation of high-order cumulants with canonical ensemble method in lattice QCD

SUZUKI, Hiroshi	18 July (Sat) 402	10:00-10:20	Background field method in the gradient flow
SUZUKI, Takashi	16 July (Thu) 406	11:20-11:40	D meson semileptonic decays from lattice QCD with chiral fermions
SYRITSYN, Sergey	16 July (Thu) 403	11:20-11:40	Neutron-antineutron oscillation matrix elements with domain wall fermions at the physical point
TÄHTINEN, Sara	15 July (Wed) 405	14:20-14:40	Approaching the conformal window: systematic study of the particle spectrum in SU(2) field theory with N_f =2,4 and 6.
TAKEDA, Shinji	14 July (Tue) 401	15:20-15:40	Phase structure of Nf=3 QCD at finite temperature and density by Wilson-Clover fermions
TANIGUCHI, Yusuke	16 July (Thu) 401	8:30-8:50	Study of high density phase transition in lattice QCD with canonical approach
TANIZAKI, Yuya	15 July (Wed) 406	17:10-17:30	Lefschetz-thimble path integral for solving the mean-field sign problem
TANTALO, Nazario	16 July (Thu) 402	11:40-12:00	Charged particles in QED with C* boundary conditions II
TOEREK, Pascal	17 July (Fri) 403	17:10-17:30	Solving the complex action problem of the finite density Z3 spin model with the density of states approach using FFA
TOMBOULIS, Terry E.	17 July (Fri) 403	14:40-15:00	Cluster expansions and chiral symmetry at large density in 2-color QCD
TOMII, Masaaki	15 July (Wed) 404	16:30-16:50	Analysis of short distance current correlators using OPE
TOMIYA, Akio	18 July (Sat) 401	9:20-9:40	Study of the U(1)A symmetry restoration in two-flavor QCD at finite temperature with reweighed overlap fermions
TORRERO, Christian	16 July (Thu) 403	9:30-9:50	A lattice study of the nucleon quark content at the physical point
TOTH, Balint	18 July (Sat) 403	9:20-9:40	Disconnected contribution to hadron correlation functions
TSANG, Justus Tobias	16 July (Thu) 406	10:40-11:00	Charm Physics at the physical point
TSUKIJI, Hidekazu	17 July (Fri) 401	17:50-18:10	Study of entropy production in Yang-Mills theory with use of Husimi function
UKITA, Naoya	14 July (Tue) 402	16:50-17:10	2+1 flavor QCD simulation near the physical point on a 96^4 lattice
ULYBYSHEV, Maksim	17 July (Fri) 405	15:00-15:20	Hybrid Monte Carlo simulations of graphene in external magnetic field
VAIRINHOS, Helvio	16 July (Thu) 401	10:40-11:00	Diagrammatic Monte Carlo simulations of staggered fermions at finite coupling
VALGUSHEV, Semen	17 July (Fri) 402	15:20-15:40	Numerical study of complex instantons in the Gross-Witten U(N) matrix model
VAQUERO AVILÉS-CASCO, Alejandro	18 July (Sat) 403	9:40-10:00	Disconnected quark loop contributions to nucleon observables using $N_f=2$ twisted clover fermions at a physical value of the light quark mass
VARNHORST, Lukas	16 July (Thu) 403	9:10-9:30	Nucleon-Sigma-Terms from Lattice QCD
VERBAARSCHOT, Jacobus	16 July (Thu) 404	9:30-9:50	Chiral Symmetry Breaking for Bosonic Partition Functions.
VILASECA MAINAR, Pol	14 July (Tue) 404	15:20-15:40	Perturbative renormalization of $\Delta S = 2$ four-fermion operators with the chirally rotated Schroedinger functional
VON HIPPEL, Georg	18 July (Sat) 403	10:40-11:00	A systematic study of excited-state effects on nucleon axial form factors
WEBER, Johannes	17 July (Fri) 401	15:00-15:20	Polyakov loop correlators and cyclic Wilson loop from lattice QCD
WEINBERG, Evan	14 July (Tue) 405	15:20-15:40	Probing near conformal dynamics with 4+8 and 8 flavors: running coupling and the spectrum
WELLEGEHAUSEN, Bjoern	18 July (Sat) 406	10:20-10:40	G(2)-QCD at finite temperature and density
WENGER, Urs	18 July (Sat) 405	9:40-10:00	Canonical simulations of supersymmetric SU(N) Yang-Mills quantum mechanics
WITTEMEIER, Christian	14 July (Tue) 404	16:50-17:10	Implementation of a non-perturbative matching strategy between heavy-light currents in HQET and QCD
WITZEL, Oliver	17 July (Fri) 406	17:10-17:30	$B-\bar B$ mixing with domain-wall light quarks and relativistic b-quarks

YAMADA, Norikazu	14 July (Tue) 401	16:30-16:50	Many flavor approach to study the nature of chiral phase transition of two-flavor QCD
YAMAMOTO, Arata	17 July (Fri) 405	14:00-14:20	Complex Langevin simulation in condensed matter physics
YAMAMURA, Ryo	15 July (Wed) 406	15:00-15:20	Renormalization of two-dimensional XQCD
YAMANAKA, Nodoka	15 July (Wed) 403	17:10-17:30	Nucleon axial and tensor charges with dynamical overlap quarks
YAMAZAKI, Takeshi	15 July (Wed) 402	14:20-14:40	Light nuclei and nucleon form factors in N_f=2+1 lattice QCD
YANG, Yibo	16 July (Thu) 403	9:50-10:10	Proton spin decomposition with overlap fermion
YONEYAMA, Hiroshi	14 July (Tue) 401	17:30-17:50	Analytic continuation of finite density QCD with heavy quarks in the strong coupling region
YOON, Boram	15 July (Wed) 403	14:20-14:40	Nucleon transverse momentum-dependent parton distributions: Comparing Clover and Domain wall fermion results at ~300 MeV pion mass
YOUNG, Ross	16 July (Thu) 403	8:30-8:50	Applications of the Feynman-Hellmann theorem in hadron structure
ZAFEIROPOULOS, Savvas	16 July (Thu) 404	9:10-9:30	The microscopic Twisted Mass Dirac spectrum and the spectral determination of the LECs of Wilson χ-PT
ZHOU, Ran	16 July (Thu) 406	9:30-9:50	Semileptonic B-meson decay phenomenology with lattice QCD
ZIELINSKI, Christian	16 July (Thu) 402	10:40-11:00	Pion spectrum for the 2-flavor staggered Wilson fermion

2.4 Poster Session [July 15 (Wednesday) 18:30 – 21:00]

Poster session is held on the fourth floor and the poster boards are placed at the corridor. Posters should be in A0 portrait format (841 mm wide, 1189 mm high) or smaller. Please note that there are no printing facilities in the conference venue.

Each poster is assigned a number and you are expected to tack your poster to the board with the corresponding number. Your poster number can be seen in the table in the next page or via the Indico system by selecting "My contributions" in the menu. Pins will be provided. Posters can be displayed for the entire duration of the conference.

The poster session will start at 18:30 on Wednesday. For those of you that receive odd numbers you should be at your posters for discussions from 19:00 to 20:00 (Group A), while those receiving even numbers should stand next to their posters from 20:00 to 21:00 (Group B). This way everyone has time to see the other posters and be found by other attendees for discussions.

- **18:30-19:00**: Free discussion
- **19:00-20:00**: Group A (Odd poster number) presentation time.
- **20:00-21:00**: Group B (Even poster number) presentation time.

- **List of Posters**

Poster No.	Presenter	Title
1	MUNSTER, Gernot	Isospin splitting in Wilson chiral perturbation theory for twisted-mass lattice-QCD with three non-degenerate quark flavours
2	JEONG, Hwancheol	calculation of strange and light quark condensate using improved staggered fermions and overlap fermions
3	HASHIMOTO, Shoji	Stochastic calculation of the QCD Dirac operator spectrum with Mobius domain-wall fermion
4	DURR, Stephan	Determination of f_K/f_pi from staggered Nf=2+1+1 ensembles
5	LEE, Weonjong	Determination of ε_K using lattice QCD inputs
6	LEEM, Jaehoon	Heavy-heavy current improvement for calculating $\bar{B} \to D^{(*)} l \bar{\nu}$ semi-leptonic form factors with Oktay-Kronfeld quarks.
7	WERNER, Markus	The Rho Resonance from N_f=2+1+1 Twisted Mass Lattice QCD
8	WOLOSHYN, Richard	Exploring free-form smearing for bottomonium and B meson spectroscopy
9	JANG, Yong-chull	Update on the Heavy-Meson Spectrum Tests of the Oktay--Kronfeld Action
10	KOCH, Vanessa	Towards string breaking with 2+1 dynamical fermions using the stochastic LapH-method
11	WAKAYAMA, Masayuki	Lattice QCD study of the I=0 scalar channel using four-quark operators
12	MCNEILE, Craig	Investigating some technical improvements to glueball calculations.
13	MURAKAMI, Yuko	The one-loop analysis of the beta-function in the Schroedinger Functional for Moebius Domain Wall Fermions
14	GONG, Ming	Quark Spin in Proton from Anomalous Ward Indentity
15	KOMA, Miho	The static three-quark potential of various quark configurations
16	ISHIKAWA, Ken-ichi	Mass and Axial current renormalization in the Schr\"{o}dinger functional scheme for the RG-improved gauge and the stout smeared $O(a)$-improved Wilson quark actions.
17	KIM, Jangho	Non-perturbative Renormalization with RI-MOM scheme for Bilinear Operators on the Fine Lattice
18	MATSUFURU, Hideo	SU(2) gauge theory with domain-wall fermions in fundamental and adjoint representations
19	NOAKI, Jun	Study of the conformal phase of the SU(3) gauge theory with domain-wall fermions
20	HASENFRATZ, Anna	The step scaling function of the SU(3) 2 flavor sextet model with Wilson fermions
21	SUORSA, Joni	Mass anomalous dimension of SU2 with Nf=8 using the spectral density method
22	AOKI, Yasumichi	S-parameter and vector decay constant in QCD with eight fundamental fermions
23	HOLLAND, Kieran	A new method to calculate the Dirac operator spectral density
24	AZUMA, Takehiro	Monte Carlo studies of dynamical compactification of extra dimensions in a model of nonperturbative string theory
25	YAMAGUCHI, Azusa	Grid: A next generation C++ library for data parallel QCD
26	MOTOKI, Shinji	Lattice QCD code set Bridge++ on arithmetic accelerators
27	CUNDY, Nigel	Overlap fermions on GPUs
28	NEGRO, Francesco	Lattice QCD with OpenAcc
29	RICHTMANN, Daniel	Multiple right-hand side setup for the DD-αAMG
30	WETTIG, Tilo	Adaptive algebraic multigrid on SIMD architectures
31	PAK, Jeonghwan	Performance of Maxwell GPUs and Optimization of Non-Perturbative Renormalization codes.
32	TAKAISHI, Tetsuya and LIU, Yubin	An application of the hybrid Monte Carlo algorithm for realized stochastic volatility model
33	GAROFALO, Marco	Instantaneous Stochastic Perturbation Theory and Gradient flow in ϕ^4 theory
34	JUETTNER, Andreas	Precision study of critical slowing down in lattice simulations of the CP^{N-1} model
35	SZYNISZEWSKI, Marcin	Strong coupling expansion of the generalized t-V model in one dimension
36	KAGIMURA, Aya	Bosonization analysis for artificial "atomic collapse" in graphene
37	UMEDA, Takashi	Towards the QCD equation of state at the physical point using Wilson fermion
38	GIUSTI, Leonardo	A novel computation of the thermodynamics of SU(3) Yang-Mills theory
39	NAKAMURA, Atsushi	Beating the sign problem in finite density lattice QCD
40	KLOIBER, Thomas	The Nonlinear O(3) Model with Chemical Potential in a Dual Representation
41	BIETENHOLZ, Wolfgang	Proposal for the Quantum Simulation of the CP(2) Model on Optical Lattices
42	YOSHIMURA, Yusuke	Grassmann tensor renormalization group for the lattice Gross-Neveu model with finite chemical potential

2.5 Excursion [July 16 (Thursday) 13:30 – 19:50]

The afternoon of Thursday, July 16 is allocated for excursions. Kobe is a convenient place to have a half-day trip to anywhere in Kansai area. We prepare 4 + 1 guided tours explained below.

NOTE : The on-line reservation was closed already, but some of the tours may be still available and can be booked on-site. Please visit the tour reception desk.

The tour buses will leave from the front north side of the conference the building (see page 44 for the map) at 13:30.

- **Tour 1 : Kobe city (Price : JPY** 4 500**, Schedule : 13:30–19:15)**
  Kobe is known as one of the best places for brewing sake. This guided tour of Kobe includes the K-computer in AICS, a sake brewery, and a free-time at Kobe Harbor Land.

- **Tour 2: Himeji castle and city (Price : JPY** 5 000**, Schedule : 13:30–19:30)**
  Himeji castle, one of the UNESCO World Heritage Sites, has recently finished its restorations. Known as Shirasagi Castle (White Heron Castle), it fully shows its beautiful white exterior now.

- **Tour 3: Nara -Todaiji area- (Price : JPY** 6 500**, Schedule : 13:30–19:50)**
  Nara used to be the capital of Japan in 8th century. Todaiji Temple is famous for the Great Buddha in the world ’s largest wooden building. You can also enjoy many other temples, shrines, museums in a walking distance from Todaiji.

- **Tour 4: Kyoto -Arashiyama area- (Price : JPY** 6 600**, Schedule : 13:30–18:45)**
  The bus will take you to Kameoka, where the Sagano Romantic Train starts. You can enjoy a beautiful view of Hozu river from this small trolley train to Arashiyama in Kyoto. In Arashiyama, you can enjoy temples such as Tenryuji, and a beautiful bamboo forest, the famed “Crossing Moon Bridge” over the Katsura River, etc.

- **Tour K: K computer (for people who are not going for an excursion)**

  The K computer is the first supercomputer in the world to achieve a LINPACK performance rating of 10 petaflops. K is open to the public and used by researchers from both academia and industry in a wide variety of fields such as drug development, disaster prevention, development of new materials, fundamental science and others.

  We reserve two slots of K computer tour.

  - **15:00 - 16:00 (max 60 people)**
  - **16:00 - 17:00 (max 60 people)**

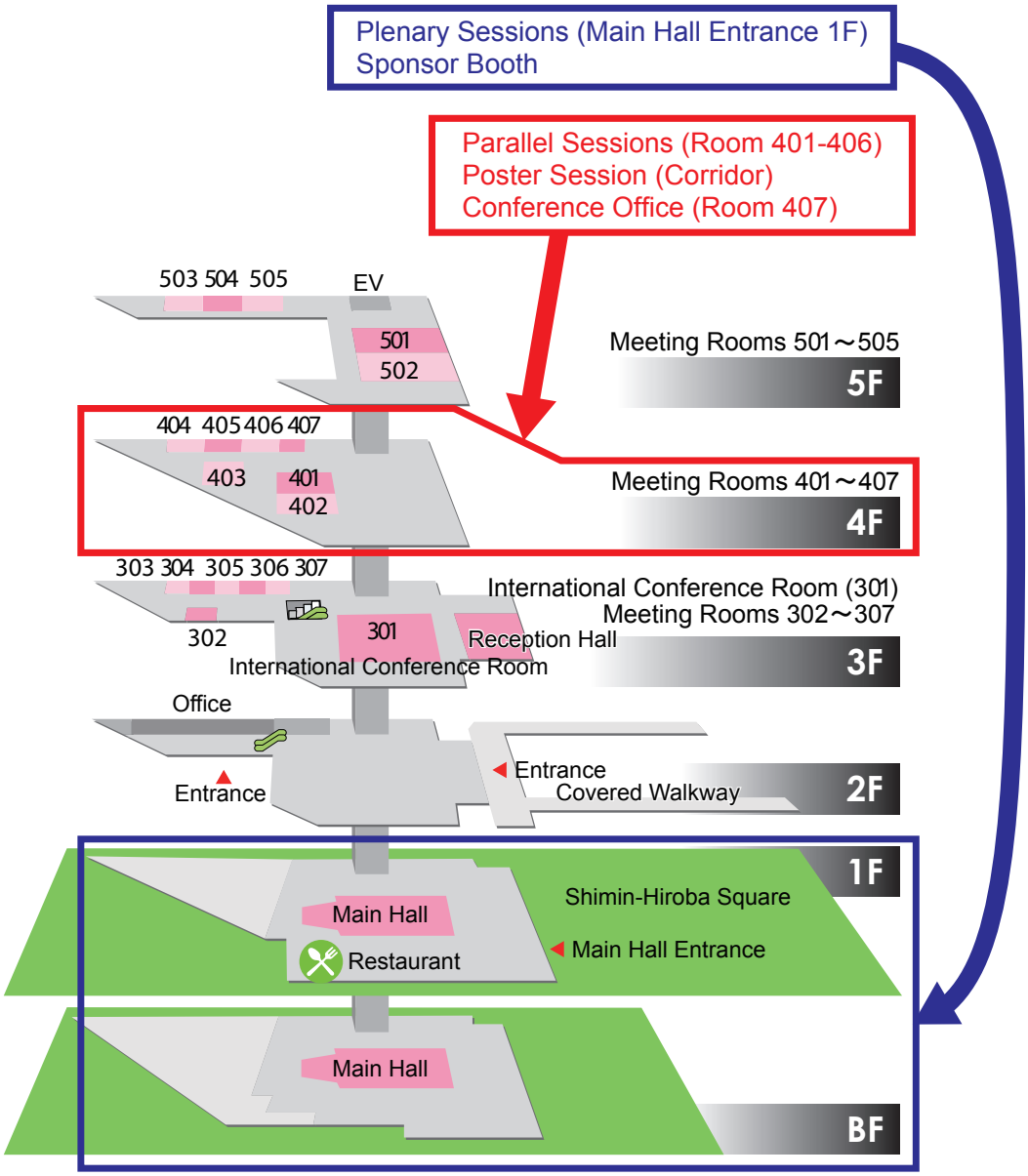
  Please visit Conference Office if you are interested in.

2.6 Banquette [July 17 (Friday) 18:30 – 21:00]

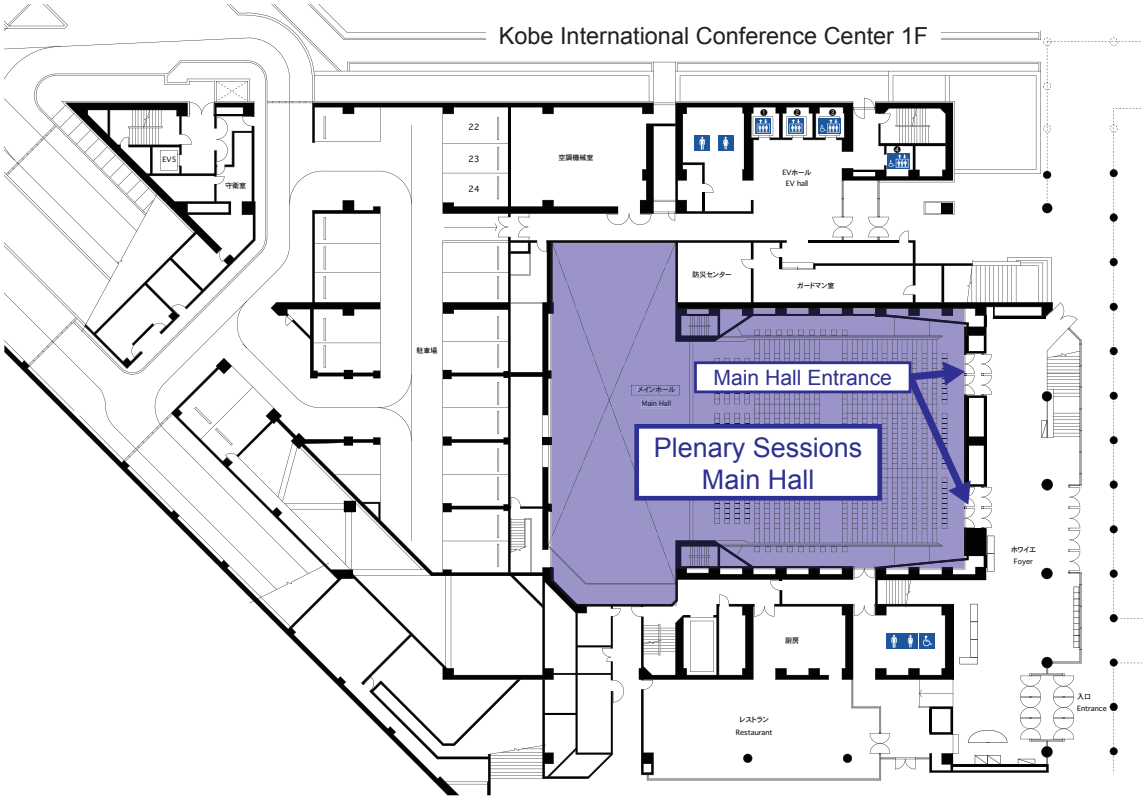
The conference banquet will be held from 18:30 on Friday, July 17 at “Ohwada” in the south wing of Kobe Portopia Hotel, located next to the Kobe International Conference Center (see page 44 for the map). Please show conference staff your banquet ticket before entering the banquet room.

3 Room Map

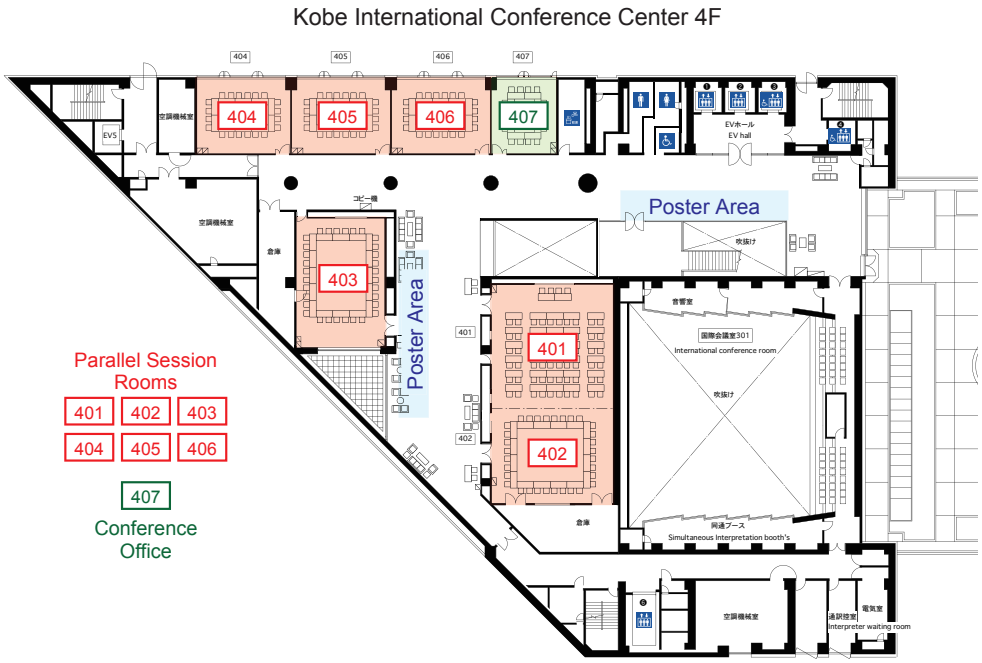
3.1 Kobe International Conference Center Building



3.2 Main Hall (Plenary Talks)



3.3 Fourth Floor (Parallel and Poster Sessions)



4 Miscellaneous Information

4.1 Conference Secretary Desk & Messages

The secretary desk is located in Room 407 on the 4th floor. It is open during the conference. The phone number to conference secretary is available from July 13 to July 18.

- **Phone number: 080-4391-6544**

4.2 Smoking Policy

Smoking is strictly prohibited except at the designated areas. There is a designated smoking area located on the second floor (see page 44).

4.3 Stores, Restaurants & Services

In Port Island, see the local area guide map in page 46. A lot of restaurants and stores can be found around Sannomiya station.

4.4 Wireless Network Access (WiFi)

Wireless Network Access is available on the corridor in the conference building.

- **SSID:** `LATTICE2015`
- **Password:** `kobe7`

4.5 Police, Fire, Medical

The domestic emergency numbers are

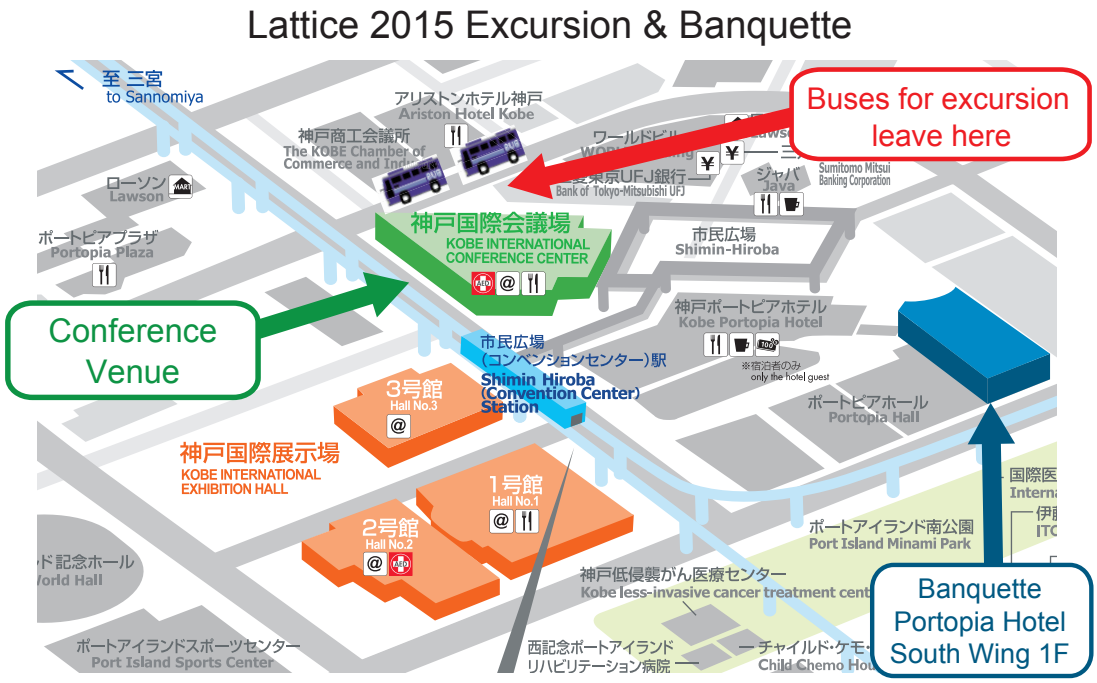
- **Police: 110**
- **Ambulance or Fire: 119**

Medical Help:

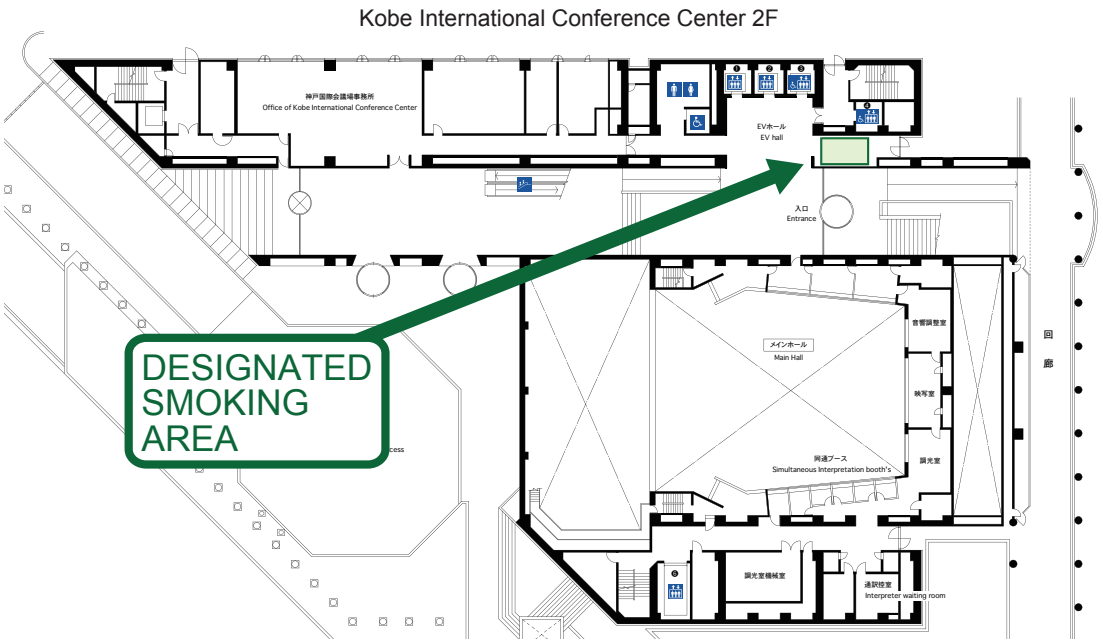
- Kobe City Medical Center General Hospital (神戸市立医療センター中央市民病院)
  - phone number: 078-302-4321
    for appointments of consultation and general information
  - Initial visits/patients without an appointment will be taken in from 8:30 am to 11:30 am, from Monday to Friday.

5 Maps

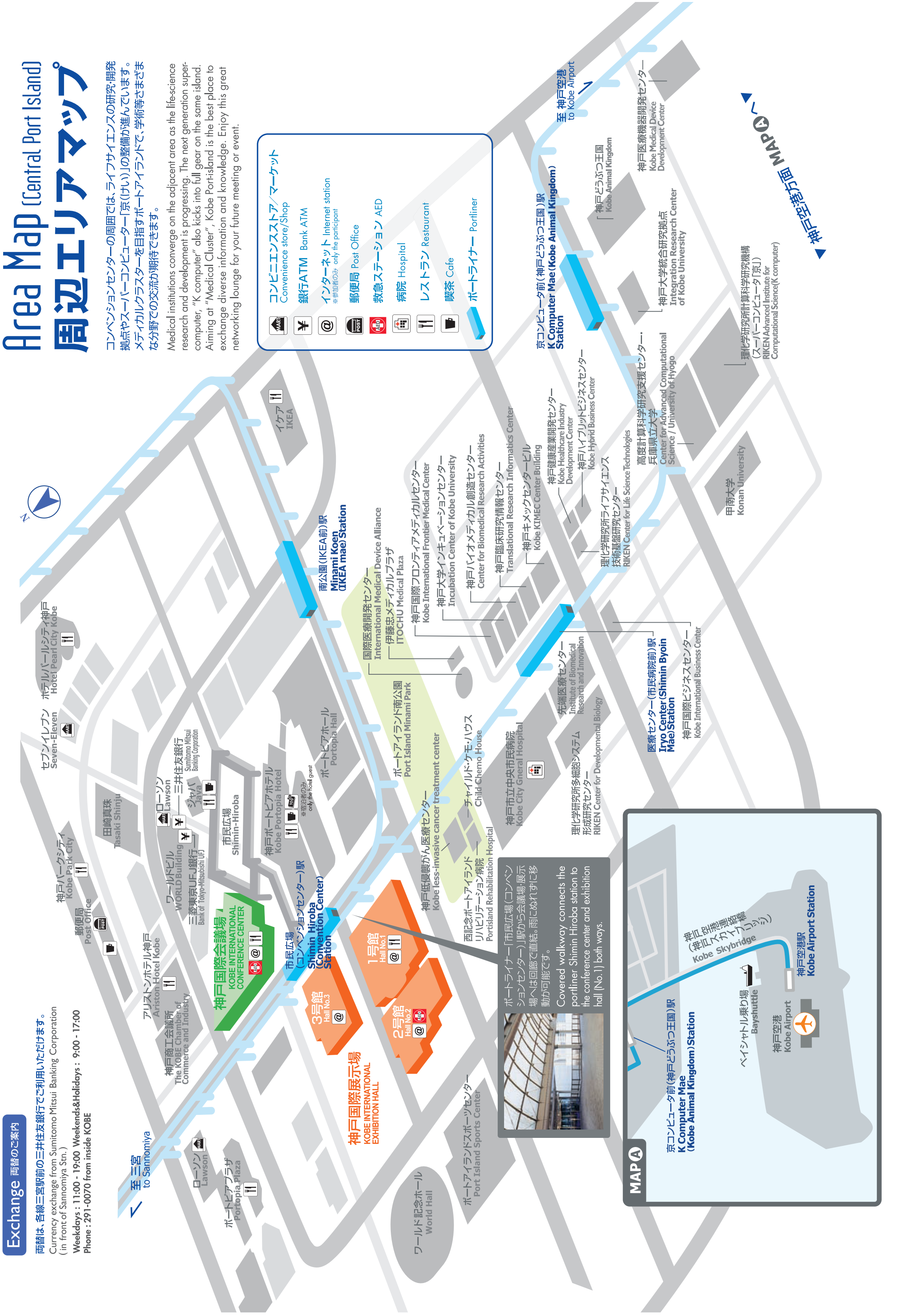
5.1 Excursion Bus and Banquette



5.2 Designated Smoking Area



5.3 Area Map


Area Map (Central Port Island)
周辺エリアマップ
コンベンションセンターの周囲では、ライフサイエンスの研究･開発拠点やスーパーコンピューター「京(けい)」の整備が進んでいます。メディカルクラスターを目指すポートアイランドで、学術等さまざまな分野での交流が期待できます。
Medical institutions converge on the adjacent area as the life-science research and development is progressing. The next generation super-computer, "K computer" also kicks into full gear on the same island. Aiming at "Medical Cluster", Kobe Port-island is the best place to exchange diverse information and knowledge. Enjoy this great networking lounge for your future meeting or event.
コンビニエンスストア／マーケット Convenience store/Shop
銀行ATM Bank ATM
インターネット Internet station
※参加者のみ only the participant
郵便局 Post Office
救急ステーション AED
病院 Hospital
レストラン Restaurant
喫茶 Cafe
ポートライナー Portliner
Exchange 両替のご案内
両替は、各線三宮駅前の三井住友銀行でご利用いただけます。
Currency exchange from Sumitomo Mitsui Banking Corporation
(in front of Sannomiya Stn.)
Weekdays : 11:00 - 19:00 Weekends&Holidays : 9:00 - 17:00
Phone : 291-0070 from inside KOBE
至 三宮 to Sannomiya
神戸パークシティ Kobe Park City
郵便局 Post Office
セブンイレブン Seven-Eleven
ホテルパールシティ神戸 Hotel Pearl City Kobe
田崎真珠 Tasaki Shinju
アリストンホテル神戸 Ariston Hotel Kobe
神戸商工会議所 The KOBE Chamber of Commerce and Industry
ワールドビル WORLD Building
三菱東京UFJ銀行 Bank of Tokyo-Mitsubishi UFJ
ローソン Lawson
三井住友銀行 Sumitomo Mitsui Banking Corporation
ジャバ Java
ポートピアプラザ Portopia Plaza
神戸国際会議場 KOBE INTERNATIONAL CONFERENCE CENTER
市民広場 Shimin-Hiroba
神戸ポートピアホテル Kobe Portopia Hotel
※宿泊者のみ only the hotel guest
市民広場(コンベンションセンター)駅 Shimin Hiroba (Convention Center) Station
ポートピアホール Portopia Hall
イケア IKEA
南公園(IKEA前)駅 Minami Koen (IKEA mae) Station
3号館 Hall No.3
1号館 Hall No.1
2号館 Hall No.2
神戸国際展示場 KOBE INTERNATIONAL EXHIBITION HALL
ワールド記念ホール World Hall
ポートアイランドスポーツセンター Port Island Sports Center
国際医療開発センター International Medical Device Alliance
伊藤忠メディカルプラザ ITOCHU Medical Plaza
ポートアイランド南公園 Port Island Minami Park
神戸国際フロンティアメディカルセンター Kobe International Frontier Medical Center
神戸低侵襲がん医療センター Kobe less-invasive cancer treatment center
神戸大学インキュベーションセンター Incubation Center of Kobe University
西記念ポートアイランドリハビリテーション病院 Portisland Rehabilitation Hospital
チャイルド･ケモ･ハウス Child Chemo House
神戸バイオメディカル創造センター Center for Biomedical Research Activities
神戸臨床研究情報センター Translational Research Informatics Center
神戸市立中央市民病院 Kobe City General Hospital
神戸キメックセンタービル Kobe KIMEC Center Building
ポートライナー「市民広場(コンベンションセンター)」駅から会議場･展示場へは回廊で直結。雨にぬれずに移動が可能です。
Covered walkway connects the portliner Shimin Hiroba station to the conference center and exhibition hall (No.1) both ways.
理化学研究所多細胞システム形成研究センター RIKEN Center for Developmental Biology
先端医療センター Institute of Biomedical Research and Innovation
神戸健康産業開発センター Kobe Healthcare Industry Development Center
神戸ハイブリッドビジネスセンター Kobe Hybrid Business Center
理化学研究所ライフサイエンス技術基盤研究センター RIKEN Center for Life Science Technologies
京コンピュータ前(神戸どうぶつ王国)駅 K Computer Mae (Kobe Animal Kingdom) Station
至 神戸空港 to Kobe Airport
神戸どうぶつ王国 Kobe Animal Kingdom
医療センター(市民病院前)駅 Iryo Center (Shimin Byoin Mae) Station
神戸国際ビジネスセンター Kobe International Business Center
高度計算科学研究支援センター･兵庫県立大学 Center for Advanced Computational Science / University of Hyogo
神戸大学統合研究拠点 Integration Research Center of Kobe University
神戸医療機器開発センター Kobe Medical Device Development Center
甲南大学 Konan University
理化学研究所計算科学研究機構(スーパーコンピュータ「京」) RIKEN Advanced Institute for Computational Science(K computer)
神戸空港方面 MAPⒶへ
MAPⒶ
京コンピュータ前(神戸どうぶつ王国)駅 K Computer Mae (Kobe Animal Kingdom) Station
神戸空港連絡橋(神戸スカイブリッジ) Kobe Skybridge
ベイシャトル乗り場 Bayshuttle
神戸空港 Kobe Airport
神戸空港駅 Kobe Airport Station

5.4 Local Area Guide Map

Memorandum .....


LATTICE
2015
KOBE