

Session Program

16-22 Jun 2019



**The 37th International Symposium on Lattice
Field Theory (Lattice 2019)**

Nonzero Temperature and Density

Monday 17 June

14:20

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Owe Philipsen

14:20-14:40 **The chiral phase transition temperature in (2+1)-flavor QCD**

Speaker

Christian Schmidt

14:40-15:00

Dirac Eigenvalue spectrum of $N_f=2+1$ QCD toward the chiral limit using HISQ fermions

Speaker

Yu Zhang

15:00-15:20

Polyakov loop susceptibility and correlators in the chiral limit

Speaker

David Clarke

15:20-15:40

Conserved charge fluctuations with smaller-than-physical quark masses

Speaker

Mugdha Sarkar

15:40-16:00

Determination of the endpoint of the first order deconfinement phase transition in the heavy quark region of QCD

Speaker

Dr Shinji Ejiri

16:00

16:30

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Kazuyuki Kanaya

16:30-16:50 **Euclidean correlation functions of the topological charge density**

Speaker

Lukas Mazur

16:50-17:10

QCD Topology to High Temperatures via Improved Reweighting

Speaker

Mr P. Thomas Jahn

17:10-17:30

Axial $U(1)$ symmetry and mesonic correlators at high temperature in $N_f=2$ lattice QCD

Speaker

Dr Kei Suzuki

17:30-17:50

Symmetries of the light hadron spectrum in high temperature QCD

17:50

Speaker

Dr Christian Rohrhofer

Tuesday 18 June

14:20

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Christian Schmidt

14:20-14:40

Tempered Lefschetz thimble method and its application to the Hubbard model away from half-filling

Speaker

Masafumi Fukuma

14:40-15:00

One-thimble regularisation of lattice field theories: is it only a dream?

Speaker

Francesco Di Renzo

15:00-15:20

On the Lefschetz thimbles structure of the Thirring model

Speaker

Kevin Zambello

15:20-15:40

Simulating gauge theories on Lefschetz Thimbles

Speaker

Felix Andreas Ziesché

15:40-16:00

The sign problem and the Lefschetz thimbles in two dimensional Hubbard model

Speaker

Semeon Valgushev

16:00

16:30

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Gert Aarts

16:30-16:50

The path optimization for the sign problem of low dimensional QCD

Speaker

Mr Yuto Mori

16:50-17:10

Exploring the QCD phase diagram at finite density by the complex Langevin method on a $16^3 \times 32$ lattice

Speaker

Dr Shoichiro Tsutsui

17:10-17:30

Applying Complex Langevin to Lattice QCD at finite μ .

Speaker

Dr Donald Sinclair

17:30-17:50

Meson Screening Masses in 2+1-Flavor QCD

Speaker

Prasad Hegde

17:50

Wednesday 19 June

09:00

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Alexander Rothkopf

09:00–09:20 **Analytic continuation of Thermal Correlators**

Speaker

Sourendu Gupta

09:20–09:40

Thermal modifications of quarkonia and heavy quark diffusion from a comparison of continuum-extrapolated lattice results to perturbative QCD

Speaker

Anna-Lena Kruse

09:40–10:00

Spectral quantities in thermal QCD: a progress report from the FASTSUM collaboration

Speaker

Gert Aarts

10:00–10:20

Mesonic correlators at non-zero baryon chemical potential

Speaker

Aleksandr Nikolaev

10:20–10:40

News from bottomonium spectral functions in thermal QCD

Speaker

Mr Samuel Offler

10:40

11:10

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Olaf Kaczmarek

11:10–11:30 **Real-Time-Evolution of Heavy-Quarkonium Bound States**

Speaker

Mr Alexander Lehmann

11:30–11:50

Euclidean correlation functions for transport coefficients under gradient flow

Speaker

Dr Hai-Tao Shu

11:50–12:10

Heavy quark diffusion coefficient from lattice

Speaker

Viljami Leino

12:10–12:30

Lattice QCD estimate of the quark-gluon plasma photon emission rate

Speaker

Arianna Toniato

12:30

Thursday 20 June

14:00

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Tamas G. Kovacs

14:00-14:20 **Topological component of Yang-Mills fields: from lattice to collider**

Speaker

Jinfeng Liao

14:20-14:40

The order of phase transition in three flavor QCD with background magnetic field in crossover regime

Speaker

Akio Tomiya

14:40-15:00

Meson masses in external magnetic fields with HISQ fermions

Speaker

Xiaodan Wang

15:00-15:20

Chiral magnetic effect in a lattice model

Speaker

Prof. Defu Hou

15:20-15:40

Conductivity of quark-gluon matter in the external magnetic field

Speaker

Nikita Astrakhantsev

15:40

16:10

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Rajiv Gavai

16:10-16:30

Phase diagram of QCD in (B, T, μ) space from analytical continuation

Speaker

Andrey Kotov

16:30-16:50

Exploring the QCD phase diagram via reweighting from isospin chemical potential

Speaker

Sebastian Schmalzbauer

16:50-17:10

Caloron gas, quark localization and chiral symmetry in high-T QCD

Speaker

Tamas G. Kovacs

17:10-17:30

The Phases of Thermal QCD

Speaker

Prof. Ivan Horvath

17:30

Friday 21 June

14:00

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Masakiyo Kitazawa

14:00-14:20

Schwinger-Keldysh formalism for Lattice Gauge Theories

Speaker

Hiroki Hoshina

14:20-14:40

Stress distribution in quark–anti-quark and single quark systems at nonzero temperature

Speaker

Mr Ryosuke Yanagihara

14:40-15:00

Non-perturbative study of heavy quark anti-quark potential at finite temperature

Speaker

Dibyendu Bala

15:00-15:20

The energy-momentum tensor in lattice QCD and the Equation of State

Speaker

Dr Michele Pepe

15:20-15:40

Critical endpoint in the continuum limit and critical endline at $\beta_t=6$ of the finite temperature phase transition of QCD with clover fermions

Speaker

Yoshifumi Nakamura

15:40

16:10

Nonzero Temperature and Density

Session | Location: Hankou | Convener: Prasad Hegde

16:10-16:30

Study of 2+1 flavor finite-temperature QCD using improved Wilson quarks at the physical point with the gradient flow

Speaker

Kazuyuki Kanaya

16:30-16:50

Lattice computation of the quark propagator in Landau gauge at finite temperature

Speaker

Paulo Silva

16:50-17:10

Partial Deconfinement

Speaker

Mr Hiromasa WATANABE

17:10-17:30

High temperature expansion method for QCD effective theories

Speaker

Mr Quang Pham

17:30