

Session Program

Aug 8 - 13, 2022



The 39th International Symposium on Lattice Field Theory (Lattice 2022)

Non-zero Density

Hörsaalzentrum Poppelsdorf, Alle Räume
Endenicher Allee 19 C, 52115 Bonn, Germany

Mon, August 8

2:00 PM

Non-zero Density: QCD at Non-zero Density I

Session | Location: CP1-HSZ, CP1-HSZ/0.011 (CP1-HSZ) - HS1 | Convener: Christof Gattringer

2:00 – 2:20 PM

Multi-point Padè for the study of phase transitions: from the Ising model to lattice QCD.

Speaker

Francesco Di Renzo

2:20 – 2:40 PM

Determination of Lee-Yang edge singularities in QCD by rational approximations

Speaker

Kevin Zambello

2:40 – 3:00 PM

Fourier coefficients of the net-baryon number density

Speaker

Christian Schmidt

3:00 – 3:20 PM

Meson screening mass at finite chemical potential

Speaker

Rishabh Thakkar

3:20 – 3:40 PM

Electromagnetic conductivity of quark-gluon plasma at finite baryon chemical potential

Speaker

Manuel Naviglio

3:40 – 4:00 PM

Magnetic catalysis in the (2+1)-dimensional Gross-Neveu model

Speaker

Mr Michael Mandl

4:00 PM

4:30 PM

Non-zero Density: QCD at Non-zero Density II

Session | Location: CP1-HSZ, CP1-HSZ/0.011 (CP1-HSZ) - HS1 | Convener: Christian Schmidt

4:30 – 4:50 PM

Pion condensation at lower than physical quark masses

Speaker

Volodymyr Chelnokov

4:50 – 5:10 PM

Nuclear Transition in the Strong Coupling Limit.

Speaker

Pratitee Pattanaik

5:10 – 5:30 PM

Towards Quantum Monte Carlo Simulations at non-zero Baryon and Isospin Density in the Strong Coupling Regime

Speaker

Wolfgang Unger

5:30 - 5:50 PM

Towards the phase diagram of cold and dense heavy QCD**Speaker**

Amine Chabane

5:50 - 6:10 PM

Inhomogeneous phases in the 3+1-dimensional mean-field Nambu-Jona-Lasinio model on the lattice**Speaker**

Laurin Pannullo

6:10 - 6:30 PM

Exponential improvement of the sign problem via contour deformations in the 2+1D XY model at nonzero density**Speaker**

Zoltan Tulipant

6:30 PM

Thu, August 11

9:00 AM

Non-zero Density: QCD at Non-zero Density III

Session | **Location:** CP1-HSZ, CP1-HSZ/0.011 (CP1-HSZ) - HS1 | **Convener:** Chris Allton

9:00 – 9:20 AM

Equation of state and Taylor expansions at nonzero isospin chemical potential

Speaker

Bastian Brandt

9:20 – 9:40 AM

Isothermal and isentropic speed of sound in (2+1)-flavor QCD at non-zero baryon chemical potential

Speaker

David Anthony Clarke

9:40 – 10:00 AM

The isentropic equation of state of (2+1)-flavor QCD: An update based on high precision Taylor expansion and Pade-resummed expansion at finite chemical potentials

Speaker

Jishnu Goswami

10:00 – 10:20 AM

A new way to calculate equation of state at finite chemical potential

Speaker

Mr Sabarnya Mitra

10:20 – 10:40 AM

Direct results for the hot and dense quark gluon plasma in the physical point vs extrapolations

Speaker

Attila Pasztor

10:40 – 11:00 AM

Resummed lattice QCD equation of state at finite baryon density: strangeness neutrality and beyond

Speaker

Jana N. Guenther

11:00 AM

11:30 AM

Non-zero Density: QCD at Non-zero Density IV

Session | **Location:** CP1-HSZ, CP1-HSZ/0.011 (CP1-HSZ) - HS1 | **Convener:** Attila Pasztor

11:30 – 11:50 AM

QCD equation of state via the complex Langevin method

Speaker

Felix Ziegler

11:50 AM – 12:10 PM

Boundary terms in Complex Langevin simulations of full QCD

Speaker
Michael Westh Hansen

12:10 - 12:30 PM **Bump of sound velocity in dense 2-color QCD**

Speaker
Etsuko Itou

12:30 - 12:50 PM **Measurement of hadron masses in 2-color finite density QCD**

Speaker
Kotaro Murakami

12:50 PM