

XQCD 2017

The 15th International Workshop on QCD in eXtreme Conditions

Monday, 26 June - Wednesday, 28 June, 2017

Aula Magna Pontecorvo, Building E, Polo Fibonacci, Largo B. Pontecorvo, 3, I-56127 Pisa

PROGRAM

Sunday, 25 June

- **Welcome and Registration Reception (17:30)**
"Cinema Teatro Lux" - Piazza Santa Caterina, 6, I-56127 Pisa

Monday, 26 June

- **8:30 - 9:00 Registration**
- **Morning Session**
 - **9:00 - 9:20 Welcome and Introduction**
 - 9:20 - 10:00 Ph. de Forcrand, "The struggle against the sign problem"
 - 10:00 - 10:25 F. Di Renzo, "Thimble regularization 5 years later"
 - 10:25 - 10:50 S. Chandrasekharan, "Fermion bag approach to Hamiltonian lattice field theories"
 - 10:50 - 11:15 U. Wenger, "Canonical simulations of heavy-dense QCD without a sign problem"
 - **11:15 - 11:45 Coffee Break**
 - 11:45 - 12:10 A. Nakamura, "Canonical Approach for Exploring Finite Density QCD"
 - 12:10 - 12:35 R. Höllwieser, "The QCD sign problem and the effective Polyakov line action"
 - 12:35 - 13:00 E. Follana, "Simulation of theories with a topological term"
 - 13:00 - 13:25 A. Gómez Nicola, "Patterns and Partners for chiral symmetry restoration"
- **Lunch Break (on site)**
- **Afternoon Session**
 - 15:00 - 15:40 J. Casalderrey-Solana, "Holographic approaches to the study of strongly interacting matter in extreme conditions"
 - 15:40 - 16:05 M. Jarvinen, "Inverse Magnetic Catalysis in Holographic QCD"
 - 16:05 - 16:30 A. Schmitt, "Dense nuclear and quark matter in holographic QCD"
 - 16:30 - 16:55 M. Attems, "Fast Hydrodynamization of Non-conformal Holographic Shockwaves"
 - 16:55 - 17:20 S. Mahapatra, "Thermal entropic destruction of quark-antiquark pair from dynamical holographic QCD"
- **17:30 - 20:00 Poster Session (with wine and cheese tasting)**

Tuesday, 27 June

● Morning Session

- 9:00 - 9:40 S. Sharma, “Recent results on QCD thermodynamics from Lattice”
- 9:40 - 10:05 G. Aarts, “Strange baryons below and above the deconfinement transition”
- 10:05 - 10:30 K. Kashiwa, “Determination of deconfinement transition from Roberge-Weiss periodicity”
- 10:30 - 10:55 A. Zhitnitsky, “The QCD phase transition at large N as BKT type transition”
- **10:55 - 11:25 Coffee Break**
- 11:25 - 11:50 F. Karsch, “Taylor series expansions for higher order cumulants”
- 11:50 - 12:15 J.O. Andersen, “QCD thermodynamics. Hard-thermal-loop perturbation theory vs lattice”
- 12:15 - 12:40 J. Kneur, “Scale invariant resummed perturbation at finite temperature”
- 12:40 - 13:05 P. Buividovich, “Diagrammatic Monte-Carlo for large-N non-Abelian lattice field theories based on the convergent weak-coupling expansion”

● Lunch Break (on site)

● Afternoon Session

- 14:50 - 15:30 I. Shovkovy , “Chiral effects in strong magnetic backgrounds: from QCD to condensed matter physics”
- 15:30 - 15:55 A. Kotov , “Lattice simulation of Chiral Magnetic Effect in Dirac Semimetals”
- 15:55 - 16:20 M. Giordano, “Landau levels in lattice QCD in an external magnetic field”
- 16:20 - 16:45 A. Tomiya, “Chiral phase transition of three flavor QCD with nonzero magnetic field”
- **16:45 - 17:15 Coffee Break**
- 17:15 - 17:40 S. Dave, “Effects of magnetic field on the plasma evolution in relativistic heavy-ion collisions”
- 17:40 - 18:05 R. Narayanan, “QED and QCD with massless fermions in three dimensions”
- 18:05 - 18:30 H. Nishimura, “Phase structure of large-N gauge theory at finite temperature”

● Social Dinner (20:00)

“Chioostro della Chiesa di Santa Maria del Carmine”, Corso Italia, 85, I-56125 Pisa

Wednesday, 28 June

● Morning Session

- 9:00 - 9:40 W. Florkowski, “Strongly interacting matter in extreme conditions: insights from hydrodynamic modeling of heavy ion collisions”
- 9:40 - 10:05 M. Stephanov, “QCD Critical Point and Hydrodynamics”
- 10:05 - 10:30 M. Alqahtani, “Quasiparticle anisotropic hydrodynamics for ultrarelativistic heavy-ion collisions”
- 10:30 - 10:55 A. Davody, “Collective Excitations in QCD Plasma”
- **10:55 - 11:25 Coffee Break**
- 11:25 - 11:50 M. Ilgenfritz, “Finite temperature gluon spectral functions from twisted mass lattice QCD”
- 11:50 - 12:15 S. Biondini, “Momentum anisotropy effects for quarkonium in a weakly-coupled quark-gluon plasma below the melting temperature”
- 12:15 - 12:40 S. Kim, “Thermal Sommerfeld effect for P-wave quarkonium in lattice NRQCD”
- 12:40 - 13:05 H. Ohno, “Quarkonium spectral functions at finite temperature on large quenched lattices and towards the continuum limit”

● Lunch Break (on site)

● Afternoon Session

- 14:30 - 15:10 S. Bernuzzi, “Constraints on extreme density matter from GW observation of neutron star mergers”
- 15:10 - 15:35 N. Sogabe, “New dynamic critical phenomena in nuclear and quark superfluids”
- 15:35 - 16:00 T. Brauner, “Neutral pion matter in strong magnetic fields”
- **16:00 - 16:30 Coffee Break**
- 16:30 - 16:55 V. Braguta, “Temperature dependence of bulk viscosity in SU(3)-gluodynamics”
- 16:55 - 17:20 Y. Taniguchi, “Energy-momentum tensor correlation function in Nf=2+1 full QCD at finite temperature”
- 17:20 - 17:45 K. Kanaya, “Thermodynamics of QCD at physical point with (2+1)-flavors of improved Wilson quarks using gradient flow”
- **17:45 - 18:00 Farewell**

● 18:00 - Pisa Walking Tour