

Program for XQCD 2013

Workshop on QCD under extreme conditions

Bern, 5-7 August 2013

Monday, August 5

- 08:30 **Registration opens**
- 09:30 Welcome
- 09:45 Urs Wiedemann News and theoretical challenges from recent heavy ion experiments
- 10:30 **Coffee Break**
- 11:00 Guy Moore NLO calculations at finite temperature and the lightcone
- 11:45 Kari Rummukainen Qhat from EQCD
- 12:15 Seyong Kim Lattice NRQCD study of bottomonium around the deconfinement temperature
- 12:45 **Lunch**
- 14:00 Harvey Meyer Non-perturbative approaches to transport properties and spectral functions in hot QCD
- 14:45 Bastian Brandt QCD thermodynamics with $O(a)$ improved Wilson fermions at $N_f = 2$
- 15:10 Heng-Tong Ding QCD transition at finite temperature with domain wall fermions
- 15:35 **Coffee Break**
- 16:10 Yu Maezawa Meson screening masses at finite temperature with highly improved staggered quarks
- 16:35 Oscar Akerlund Scale hierarchy in high-temperature QCD
- Sponsor talks Poster session opens
- 17:00 Mike Clark TBA
- 17:30 Edmund Preiss Intel's HPC and Xeon Phi oriented Software development tools
- 18:00 **Apero** Poster session continues

Tuesday, August 6

- 09:15 Heiri Leutwyler The mass of the two lightest quarks
- 10:00 Christian Schmidt The strange degrees of freedom in QCD at high temperature
- 10:30 **Coffee Break**
- 11:00 Dean Lee Lattice effective field theory for nuclear physics
- 11:45 Sourendu Gupta The QCD critical point
- 12:15 Andrei Alexandru QCD at imaginary chemical potential with Wilson fermions
- 12:45 **Lunch**
- 14:00 Michael Endres Unitary fermions
- 14:45 Simon Hands A strongly-interacting Fermi surface? Voltage-biased bilayer graphene
- 15:10 Yuji Sakai Analytic continuation in two color QCD with clover-improved Wilson fermion at finite density
- 15:35 **Coffee Break**
- 16:10 Rajiv Gavai Quark number susceptibility divergence can be subtracted off
- 16:35 Jacques Bloch Solving the sign problem in one-dimensional QCD
- 17:00 Thomas Kloiber Dual methods for lattice field theories at finite density
- 17:25 Kim Splittorff The QCD sign problem as a total derivative
- 17:50 **Group photo**
- 19:00 **Dinner** Restaurant Rosengarten

Wednesday, August 7

09:15	William Detmold	QCD at nonzero isospin density
10:00	Leonard Fister	Gluodynamics in 2-colour matter at high density
10:30	Coffee Break	
11:00	Falk Bruckmann	Thermodynamic properties of QCD in external magnetic fields
11:45	Shailesh Chandrasekharan	Fermion bag solutions to sign problems
12:15	Denes Sexty	Simulations of full QCD using the complex Langevin equation
12:45	Lunch	
14:00	Mithat Unsal	Center symmetry, neutral bions and (a tiny little bit of) resurgence theory
14:45	Joyce Myers	Large N relationship of weakly coupled QCD on the hypersphere with strongly coupled lattice QCD
15:10	Tiago Nunes	Probing the conformal window on the lattice
15:35	Coffee Break	
16:10	Matti Jarvinen	Finite-temperature holographic QCD in the Veneziano limit
16:35	Kouji Kashiwa	Phase diagram and Hosotani mechanism in QCD-like theory with compact dimensions
17:00	Ting-Wai Chiu	Chiral symmetry and axial U(1) symmetry in finite temperature QCD with domain-wall fermion
17:25	Jeff Greensite	Effective Polyakov line actions and the sign problem
17:50	Adjourn	