

YITP long-term workshop

New Frontiers in QCD 2018

- Confinement, Phase Transition, Hadrons, and Hadron Interactions -

May 28 - June 29, 2018

Yukawa Institute for Theoretical Physics, Kyoto University

Timetable of the 2nd week (June 4 - June 8)

<u>June 4 (Mon.)</u>	<u>June 5 (Tue.)</u>	<u>June 6 (Wed.)</u>	<u>June 7 (Thu.)</u>	<u>June 8 (Fri.)</u>
9:30-10:30 K. Redlich	9:30-10:30 J. Nishimura	9:30-10:30 J. Steinheimer	9:30-10:30 A. Bzdak	9:30-10:30 S. Ejiri
10:30-11:00 Coffee	10:30-11:00 Coffee	10:30-11:00 Coffee	10:30-11:00 Coffee	10:30-11:00 Coffee
11:00-12:00 Y. Nara	11:00-12:00 E. Itou	11:00-12:00 S. Esumi	11:00-11:30 J. Li 11:30-12:00 A. Monnai	11:00-11:30 M. Hongo
	14:00-15:00 R. Sharma 15:00-15:30 T. Hirakida	14:00-15:00 Y. Akamatsu	14:00-14:30 H. Fujii 14:30-15:00 K. Hattori	
15:00-15:30 Coffee	15:30-16:00 Coffee	15:00-15:30 Coffee	15:00-15:30 Coffee	15:00-15:30 Coffee
	16:00-16:30 A. Ohnishi 16:30-17:00 S. Tsusui 17:00-17:30 K. Morita		15:30-16:00 E. Säppi 16:00-16:30 T. Hayata 16:30-17:00 M. Pospiech 17:00-17:30 M. Leonhardt	

June 4 (Mon)

(Chair: A. Ohnishi)

- 9:30-10:30 Krzysztof Redlich (Wroclaw U.)
"The chiral phase transition and systematics of the net-baryon number fluctuations: from S-matrix approach and effective QCD models"
- 10:30-11:00 coffee
- 11:00-12:00 Yasushi Nara (Akita International U.)
"K/pi ratios from a dynamically integrated transport approach"
- 15:00-15:30 coffee

June 5 (Tue)

(Chair: P. de Forcrand)

- 9:30-10:30 Jun Nishimura (KEK)
"Complex Langevin simulation of finite density QCD"
- 10:30-11:00 coffee
- 11:00-12:00 Etsuko Itou (Kochi U./RCNP, Osaka U.)
"Phase diagram of two-color QCD at finite temperature and density using exact algorithm"

(Chair: J. Steinheimer)

- 14:00-15:00 Rishi Sharma (DTP, TIFR)
"Current correlations and dynamics near the QCD crossover"
- 15:00-15:30 Takehiro Hirakida (Kyushu U.)
"Thermodynamics for SU(2) gauge theory using gradient flow"
- 15:30-16:00 coffee

(Chair: J. Nishimura)

- 16:00-16:30 Akira Ohnishi (YITP)
"The path optimization method to avoid the sign problem"
- 16:30-17:00 Shoichiro Tsutsui (KEK)
"Complex Langevin analysis of the finite density QCD"
- 17:00-17:30 Kenji Morita (Wroclaw U. & RIKEN)
"TBA"

June 6 (Wed)

- 9:30-10:30 Jan Mattes Steinheimer-Froschauer (FLAS)
"Heavy-ion collisions at high baryon densities: Modelling the QCD phase transition"
- 10:30-11:00 coffee
- 11:00-12:00 ShinIchi Esumi (Tsukuba U.)
"Beam-energy scan in relativistic heavy-ion collisions"
- 14:00-15:00 Yukinao Akamatsu (Osaka U.)
"Quantum Dissipation of Heavy Quarks in the Quark-Gluon Plasma"
- 15:00-15:30 coffee

June 7 (Thu)

- 9:30-10:30 Adam Bzdak (AGH Krakow)
"Fluctuations and multiparticle correlations in heavy-ion collisions"
- 10:30-11:00 coffee
- 11:00-11:30 Jixing Li (Peking U.)
"Noncritical fluctuations of (net) charges and (net) protons from the iEBE-VISHNU hybrid model"
- 11:30-12:00 Akihiko Monnai (IPhT)
"Constraining the QCD equation of state in hadron colliders"
- 14:00-14:30 Hirotsugu Fujii (Tokyo U.)
"Complexification approach to the sign problem (TBD)"
- 14:30-15:00 Koichi Hattori (Fudan U.)
"TBA"
- 15:00-15:30 coffee
- 15:30-16:00 Eeli Matias Säppi (Helsinki U.)
"Probing the Cold & Dense Pressure With pQCD"
- 16:00-16:30 Tomoya Hayata (Chuo U.)
"Diffusive Nambu-Goldstone modes in time crystals"
- 16:30-17:00 Martin Klaus Pospiech (TU Darmstadt)
"The phase diagram of hot and dense QCD"
- 17:00-17:30 Marc Leonhardt (TU Darmstadt)
"Symmetry breaking patterns in dense QCD"

June 8 (Fri)

- 9:30-10:30 Shinji Ejiri (Niigata U.)
"Thermodynamics near the first order phase transition point of SU(3) gauge theory"
- 10:30-11:00 coffee
- 11:00-11:30 Masaru Hongo (RIKEN iTHEMS)
"Path-integral formula for local thermal equilibrium"
- 15:00-15:30 coffee