

# “QCD vacuum and matter under strong magnetic field”

Oct. 15-17, 2014, Seminar room 319, Theory Division, IHEP/CAS

---

## Wednesday, Oct. 15<sup>th</sup>, 2014

### Morning session

Chair: Pengfei Zhuang

8:30-9:00 Registration

9:00-10:30 Lattice QCD with a magnetic background field and its relevance for heavy ion physics [Andreas Schaefer](#)

10:30-10:40 *Group photo in front of the gate of Theory Division*

10:40-11:00 *Coffee break*

11:00-12:30 Search for chiral effects at STAR [Gang Wang](#)

12:30 Lunch at the Restaurant of Guest House, IHEP/CAS

### Afternoon session

Chair: Hongshi Zong

14:30-15:15 Electromagnetic field and anomalous transport in heavy-ion collisions and in cold atoms [Xu-Guang Huang](#)

15:15-16:00 Vorticity and magnetic field production in relativistic ideal fluids [Jian-Hua Gao](#)

16:00-16:30 *Coffee break*

16:30-17:10 Charged rho mesons in Dyson Schwinger approach [Kun-Lun Wang](#)

17:10-17:40 Towards complete phase diagrams of a holographic P-wave superconductor model [Run-Qiu Yang](#)

17:40-18:00 Is there charged rho condensation? [Hao Liu](#)

18:30 Reception at the Restaurant of Guest House, IHEP/CAS

**Thursday, Oct.16<sup>th</sup>, 2014**

**Morning Session      Chair: Jinfeng Liao**

9:00-10:30    Chiral asymmetry: A remarkable form of magnetization in relativistic matter      Igor Shovkovy

10:30-11:00    *Coffee break*

11:00-12:30    The Magneto-sono-luminescence: photon and dilepton production in magnetic field      Gokce Basar

12:30      Lunch at the Restaurant of Guest House, IHEP/CAS

**Afternoon Session      Chair: Defu Hou**

14:30-15:15    Effective potential of QCD with strong magnetic fields at zero and finite temperatures      Sho Ozaki

15:15-16:00    Quarkonia in Strong magnetic field      Shuzhe Shi

16:00-16:30 *Coffee break*

16:30-17:15    BCS/BE crossover in a magnetic field-the BE limit      Bo Feng

17:15-18:00    Induced local chiral imbalance in chiral symmetric phase and inverse magnetic catalysis      Lang Yu

18:30      Banquet at Quanjude Peking roasted duck restaurant

**Friday, Oct.17<sup>th</sup>, 2014**

**Morning Session Chair: Xu-Guang Huang**

**9:00-10:30** Magnetic Catalysis vs Chiral Gap Effect **Kenji Fukushima**

*10:30-11:00 Coffee break*

**11:00-12:30** Chiral effects and anomalous transport in the extreme matter **Jinfeng Liao**

**12:30 Lunch at the Restaurant of Guest House, IHEP/CAS**

**Afternoon Session Chair: Mei Huang**

**14:30-15:15** Final state effects on chiral magnetic effect  
and chiral magnetic wave **Guo-Liang Ma**

**15:15-16:00** Chiral kinetic theory and Berry phase **Shi Pu**

*16:00-16:30 Coffee break*

**16:30-17:15** Polarization energy loss in hot viscous quark-gluon plasma **Bingfeng Jiang**

**17:15-17:45** Magnetar in SU(3) NJL model with vector interaction  
and magnetized gluon potential **Pengcheng Chu**

**17:45-18:00** Summary and free discussion

**Instruction to access IHEP wireless network**

- 1) Connect "IHEP"
- 2) Start web browser and try to visit any web, then you will be redirected to a similar registration page. Please choose "Visitor ", and fill the registration form with **Conference ID: P0V9L5V2**. You will be able to access the wireless network after the registration succeeded.