

**5th China-Korea workshop on stellar dynamics and gravitational waves**

**Dec 12/13, 2013**

**NAOC, Room A601**

**Hosted by Hyung Mok Lee (SNU) and Rainer Spurzem (NAOC)**

Talks: Long (30 mins), including 10 mins discussion

Short (15 mins), including 5 mins discussion

Lunch on Thursday: Lunch Boxes offered, order in coffee break before

**Thursday, Dec. 12, Morning Session 09:30 – 12:00**

Welcome, Opening, Introduction: Hyung Mok Lee and Rainer Spurzem (15 mins)

Hee Il KIM (KISTI and Seoul National Univ.): Relativistic hydrodynamics (30 mins)

Shuo LI (NAOC, Silk Road Project): Tidal Disruption: a probe for understanding the evolution of supermassive black hole binaries (30 mins)

**Coffee/Tea Break 10:45 – 11:15**

Shiyan ZHONG (NAOC, Silk Road Project): Supermassive black holes accreting stars through tidal disruption in axisymmetric galactic nuclei (30 mins)

Yohai MEIRON (KIAA, Silk Road Project): N-Body simulations with series expansion methods in stellar dynamics (30 mins)

**LUNCH Break (12:15 – 13:30)**

**Thursday, Dec. 12, Afternoon Session**

Gareth KENNEDY (NAOC, Silk Road Project): The role of three-body stability in tidally interacting globular clusters. (30 mins)

Jose FIESTAS (NAOC, Silk Road Project): Stellar distributions in multi-mass rotating clusters with Black Holes (30 mins)

Long WANG (KIAA, Silk Road Project): Star Cluster Simulations with GPUs and NBODY6++ and Ejected Stars, Hardening and Eccentricity Growth of Supermassive Black Hole Binaries (30 mins)

Rainer SPURZEM (NAOC/KIAA, Silk Road Project): Pulsar Timing and its role to detect gravitational waves of Supermassive Black Holes (30 mins)

**Coffee/Tea Break 15:30 – 16:00**

Maxwell TSAI (Xu CAI) (NAOC, Silk Road Project): N-Body simulations in AMUSE and new visualization methods, including astrophysical parameters. (30 mins)

Siyi HUANG (NAOC, Silk Road Project): A detailed timing and profiling model of NBODY6++ using MPI and GPU parallelization (15 mins)

Paulina ASSMANN (Univ. Chile, Silk Road Project): Post-Newtonian Dynamics of Black Holes with Spin in Star Cluster Simulations with NBODY6++ (30 mins)

Bekdaulet SHUKIRGALIYEV (Fesenkov Institute, Almaty, STARDISK project): Dynamics of dense star clusters around supermassive black holes with and without central gas disks (30 mins)

**End of Session 17:45**

**Friday, Dec. 13, Morning Session 10:00 – 11:00**

(Talk 20 mins = 15 mins + 5 mins discussion)

Changhua LI (Center of Information and Computing and Silk Road Project, NAOC): Short Report on the laohu GPU cluster usage at NAOC (20 mins)

Peter BERCZIK (NAOC/Heidelberg, Silk Road Project): Current and future status of hardware testing with Kepler GPUs and Intel MICs (20 mins)

Discussion of current and future projects; summary (Hyung Mok Lee and Rainer Spurzem, Panel and Plenary Discussion)

**End of Session: 11:00**

**Coffee Break available 11:00 – 11:30**