

A Mini-Workshop on

"Gamma-ray Sky from Fermi: Neutron Stars and their Environment"

DATE: June 21-25, 2010

VENUE: Lecture Theatre T2, Meng Wah Complex, The University of Hong Kong

Program

Monday, June 21

08:45-09:00 **Registration**

Morning session - I. Globular Clusters

Chair: K.S.Cheng

09:00-09:10 **Introduction** - K S Cheng (HKU)

09:10-09:45 **Neutron Star Environment: from Supernova Remnants to Pulsar Wind Nebulae** - Stephen Ng (McGill U, Canada)

09:45-10:20 **Gamma-ray emission from Terzan 5** - Albert Kong (THU, Taiwan)

10:20-10:45 **Gamma-ray point sources** - Ting-Ni Lu (THU, Taiwan)

Tea Break

11:00-11:35 **Globular Clusters: MSP Population, X-ray and Gamma-ray emission**
- David Hui (Chungnam National University, South Korea)

11:35-12:10 **Gamma-ray emission from Pulsar Binaries** - Jumpei Takata (HKU)

12:10-12:35 **X-ray point sources in globular clusters** - Hsiu-Hui Huang (MPE, Germany)

Afternoon session - II. High Energy Phenomena around Blackholes

Chair: Albert Kong

14:00-14:35 **Gamma-ray emission from AGN** - Jun Hui Fan (Guangzhou University)

14:35-15:10 **Transient gamma-rays and multi-wavelength emission from stellar capture events** - Xiangyu Wang (NJU, China)

15:10-15:35 **Microquasars** - Phyllis Yen, Tzu-Ching (THU, Taiwan)

Tea Break

- 16:00-16:35 **Very high energy Gamma-ray emission** - Thomas Tam (THU, Taiwan)
- 16:35-17:00 **Frequency Variation of the kHz QPOs and the flux of the band-limited noise in Scorpius X-1** - Xiaofeng Cao (Huazhong Normal U./Shanghai Astronomical Observatory)
- 17:00-17:25 **Accretion-driven Millisecond X-ray Pulsars and the Discovery of the First Eclipsing Event** - Yi Jung Yang (University of Amsterdam, the Netherlands)
- 17:25-17:50 **The Optical Microvariability of the BL Lacertae Object S5 0716+714 and Its Multi-waveband Correlations** – Helen Poon (Beijing Normal University)

Tuesday June 22

Morning session - III. Transient Gamma-ray Emission

Chair: Stephen Ng

- 09:00-09:35 **Gamma-ray bursts with magnetars as central engines**
- Yunwei Yu (HKU/Huazhong U)
- 09:35-10:10 **Gamma-rays production resulting from the annihilation of neutrino/antineutrino emitted from accretion disk surrounding a compact object** - Zoltan Kovacs (HKU)
- 10:10-10:35 **GRB ring-shaped jets and their afterglows** - Ming Xu (NJU, China)

Tea Break

- 11:00-11:25 **A numerical study of the afterglow emission from GRB double-sided jets**
- Xin Wang (NJU, China)
- 11:25-11:50 **Modeling the GRB afterglow numerically** - Siwei Kong (NJU, China)
- 11:50-12:15 **Synchro-Curvature Self-Compton Radiation of Electrons in Curved Magnetic Fields** - Bo Zhang (NJU, China)

Afternoon session - IV. Gamma-ray Pulsars

Chair : David Hui

- 14:00-14:35 **Neutron Star Zoo: Radio Pulsars, Magnetars, and Central Compact Objects**
- Stephen Ng (McGill U, Canada)
- 14:35-15:10 **A Monte Carlo Study of gamma-ray pulsars** - Jumpei Takata (HKU)
- 15:10-15:35 **Periodicity search of the Geminga-like pulsars**
- Lupin Chun-Che Lin (NCU, Taiwan)

Tea Break

- 16:00-16:35 **A model of gamma-ray pulsars** - K.S. Cheng (HKU)
- 16:35-17:00 **A theoretical study of spectral properties of gamma-ray pulsars**
- Yu Wang (HKU)
- 17:00-17:25 **The damping mechanism and the thermal evolution of neutron stars**
- Shu-Hua Yang (Huazhong Normal U.)

Wednesday June 23

Morning session - Training course

Afternoon session - Discussion

Thursday June 24

Morning session - Training course

Afternoon session - Discussion

Friday June 25

Morning session - Training course

Afternoon session - Discussion