

The Sixth Workshop on Black Hole Magnetospheres

National Center for Theoretical Sciences

National Tsing Hua University

2013

March 4 (Mon) Pre-workshop Lectures (Room 620, Physics bldg., NTHU)

15:30-16:30	Kinwah Wu	<i>Overview of accretion and outflows around black holes</i>
16:30-17:15	Kouichi Hirotoni	<i>Radiative processes in high-energy astrophysics</i>
17:45-18:15	Kinwah Wu	<i>Radiative transfer and ray tracing around black holes</i>

March 5 (Tue) Workshop on BH magnetospheres (Lecture room A, 4F, NCTS, NTHU)

General relativistic magnetohydrodynamics and basic properties of black holes

09:00-09:45	Takahashi, Masaaki	<i>GRMHD inflows and outflows in a BH magnetosphere</i>
09:45-10:30	Koide, Shinji	<i>Review of primary and recent GRMHD simulations</i>
11:00-11:45	Fujisawa, Kotaro	<i>Let's solve GS equation!</i>
11:45-12:30	Yoshida, Shijun	<i>New solutions of charged regular black holes and their stability</i>
12:30-13:45	Lunch	

Basic BH properties and gravitational waves

13:45-14:30	Nakao, Ken-ichi	<i>On "Meissner" effect of extreme black hole</i>
14:30-15:15	Isoyama, Southirou	<i>Toward the adiabatic evolution of the extreme-mass-ratio inspirals in resonance</i>

Phenomena around rotating black holes

15:45-16:30	Saida, Hiromi	<i>Detecting black holes by waves</i>
16:30-17:15	Takada, Masato	<i>Brightness of rim of black hole shadow</i>
17:15-18:00	Masuda, Atuki	<i>Propagation of wave with orbital angular momentum in Kerr space-time</i>

March 6 (Wed) Workshop on BH magnetospheres (Lecture room A, 4F, NCTS, NTHU)

Interaction between rotating black holes and their surroundings

09:00-09:45	Wu, Kinwah	<i>Gravito-magnetism and orbital dynamics of spinning neutron stars around massive black holes</i>
09:45-10:30	Takamori, Yousuke	<i>Analysis of the Blandford-Znajek power for a rapidly rotating black hole</i>

Wave optics around black holes

11:00-11:45	Nambu, Yasusada	<i>Viewing black holes by waves</i>
11:45-12:30	Kanai, Ken-ichiro	<i>Numerical Simulation of Wave Scattering by Black Hole</i>
12:30-13:45	Lunch	

VLBI Imaging of radiation from the vicinity of black holes

13:45-14:30	Miyoshi, Makoto	<i>A First Black Hole Imager, Caravan-submm</i>
14:30-15:15	Asada, Keiichi	<i>Greenland telescope project</i>
15:45-16:30	Nakamura, Masanori	<i>Exploring M87 with Sub-mm VLBI: How Can We Test Theories?</i>
16:30-17:15	Algaba, Juan Carlos	<i>Probing the magnetic structure of AGNs at 1pc with VLBI rotation measures</i>
17:15-18:00	Discussion	<i>VLBI observations of black hole vicinities</i>
18:30-	Banquet	

March 7 (Thu) Workshop on BH magnetospheres (Lecture room A, 4F, NCTS, NTHU)

Pulsars, AXPs, SGRs, and jets

09:00-09:45	Hirotsugu, Kouichi	<i>High energy emission from pulsar magnetospheres</i>
09:45-10:30	Wada, Tomohide	<i>Particle method for axisymmetric pulsar Magnetosphere</i>
11:00-11:45	Mizuno, Yosuke	<i>Current-Driven Kink Instability in a Magnetically Dominated Relativistic Jet</i>
11:45-12:30	Pu, Hung-Yi	<i>Jet launching from the vicinity of BHs</i>
12:30-13:00	Wang, Joan	<i>Can a neutron star recollapse? — A new perspective for the formation of SGRs/AXPs</i>
13:00-13:20	Discussion	<i>Future collaboration on BH physics between Taiwan and Japan</i>
13:30-	Excursion	