

2019 APCTP School/Workshop on Gravitational-Wave Cosmology

Date: 2019/11/30 ~ 2019/12/4

Place: Auditorium on the first floor of Institute of Physics, Academia Sinica

Workshop	
Saturday (11/ 30)	
09:00	Registration
09:50	Welcome Speech Mei-Yin Chou (Vice President Academia Sinica & APCTP Trustee)
Kin-Wang Ng (Chair)	
10:00	Jun'ichi Yokoyama (RESCEU, University of Tokyo) <i>Gravitational waves as a probe of the history of the Universe</i>
10:45	Yi-Zen Chu (National Central University) <i>Gauge invariance, nonlocality and observables in gravitational physics</i>
11:20	Arun Kumar Pandey (University of Delhi) <i>Chiral plasma instability and primordial gravitational wave</i>
11:45	Yi-Peng Wu (RESCEU, University of Tokyo) <i>Statistical bias for black hole mass functions from the inflationary power spectrum</i>
12:10	Group Photo
12:20	Lunch
Hing Tong Cho (Chair)	
13:30	Atsushi Nishizawa (RESCEU, University of Tokyo) <i>Observational predictions of the viable generalized scalar-tensor theory</i>
14:15	Yuki Inoue (National Central University) <i>The development and characterization of KAGRA gravitational wave telescope toward the joining of worldwide observing run 3</i>
14:50	Xun Xue (East China Normal University) <i>The effective quintessence from string landscape</i>
15:25	Coffee Break
Wolung Lee (Chair)	
16:00	Student Presentations
Each 15 min.	Yu-Kuang Chu (Institute of Physics, Academia Sinica) <i>Spherical harmonic analysis of stochastic gravitational wave background anisotropies</i> Keitaro Tomikawa (Rikkyo University) <i>On the gauge dependence of gravitational waves generated at second order from scalar perturbations</i> Irvin Martinez (University of Cape Town) <i>Binary black hole spin evolution in dense stellar systems: distinguishing formation channels</i>

Each 10 min.	<p>Un-Pang Chang (Institute of Astrophysics, National Taiwan University) <i>Constraints on gravitational waves induced by delta-function curvature perturbations</i></p> <p>Hsu-Wen Chiang (LeCosPA, National Taiwan University) <i>Exponential decay of the horizon deformation in a dynamical super-translated black hole system</i></p> <p>Rafkat Galeev (Dept of General Relativity and Gravity Theory, Kazan Federal University) <i>Homogeneous models in Horndeski theory</i></p> <p>Reggie Pantig (De La Salle University) <i>The Effect of Dark Matter on Kerr Spacetime</i></p> <p>Muhammad F. Alfian R. Sakti (Bandung Institute of Technology) <i>Kerr/CFT correspondence on Kerr-Newman-NUT-Quintessence black hole</i></p> <p>Shivani Sharma (Birla Institute of Technology and Science Pilani) <i>Observational constraints on the extension of CPL model via Bianchi type I spacetime</i></p> <p>Santosh Kumar Yadav (Birla Institute of Technology and Science Pilani) <i>Effects of time-varying dark energy on dark matter-photon coupling model</i></p>
19:30	Banquet

Workshop	
Sunday (12/1)	
Jun'ichi Yokoyama (Chair)	
09:00	Jai-chan Hwang (Kyungpook National University) <i>Gauge dependence of gravitational waves generated from scalar perturbations</i>
09:40	Shu-Lin Cheng (Institute of Physics, Academia Sinica) <i>Primordial black holes and associated gravitational waves in axion inflation</i>
10:05	Alessandro Parisi (Tamkang University) <i>Fundamental oscillation modes of boson stars and gravitational constraint</i>
10:30	Coffee Break
Meng-Ru Wu (Chair)	
11:00	Chun-Hung Chen (The Institute for Fundamental Study, Naresuan University) <i>A new (original) set of quasi-normal modes in spherically symmetric AdS black hole spacetimes</i>
11:25	Che-Yu Chen (LeCosPA, National Taiwan University) <i>Testing gravity theories with gravitational waves via quasinormal modes</i>
11:50	Meng-Ru Wu (Institute of Physics, Academia Sinica) <i>r-process nucleosynthesis in neutron star mergers</i>
12:25	Lunch
FREE	

School			
Date Time	Monday (12/2)	Tuesday (12/3)	Wednesday (12/4)
09:00	Registration	Guo-Chin Liu II	Jai-chan Hwang III
10:30		Coffee Break	
11:00	Jai-chan Hwang I	Atsushi Nishizawa II	Kin-Wang Ng I
12:30	Lunch		
14:00	Guo-Chin Liu I	Jai-chan Hwang II	Hsin-Yu Chen II
15:30	Coffee Break		
16:00-17:30	Atsushi Nishizawa I	Hsin-Yu Chen I	Kin-Wang Ng II
18:00	Reception	Banquet	Adjourn