Program

Aug. 23

-14:00 Check-in

14:00-18:00 Afternoon session

Chair: Kazuhiro Kanagawa

14:00-14:10 Yasushi Suto Opening

14:10-15:10 (L) Tanmay Vachaspati Primordial magnetic fields (1)

Break (10 min)

15:20-16:20 (L) Konstantin Batygin Core nucleated accretion theory of giant planet formation

Break (10 min)

16:30-17:00 Erik Petigura Formation and Erosion of Small Planet Cores and Envelopes

17:00-17:15 **Hiroto Mitani** Photoevaporation of Exoplanet Atmosphere

17:15-17:30 **Shijie Wang** Planetary migration and accretion effect on the long-term orbital stability of a multi-planetary system: case of HL Tau

17:30-17:45 Gianni Cataldi Gaseous debris disks

17:45-18:00 **Masataka Aizawa** Systematic study of alignment of disk orientations in nearby star-forming regions

19:00- Dinner

Aug. 24

7:00-9:00 Breakfast

9:00-12:20 Morning session

Chair: Toyokazu Sekiguchi

9:00-10:00 (L) Konstantin Batygin Angular momentum evolution of giant planets and the hot Jupiter radius inflation problem

Break (10 min)

10:10-11:10 (L) Tanmay Vachaspati Primordial magnetic fields (2)

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From the Solar System to the Universe

Break (10 min)

11:20-11:35 **Kazuhiro Kanagawa** Effects of dust feedback on evolutions of a protoplanetary disk and a giant planet

11:35-11:50 Yuta Tarumi R-process enrichment of Ultra-Faint Dwarf galaxies

11:50-12:05 **Hiroaki Tahara** Angular stability condition for static and spherically symmetric spacetime

12:05-12:20 **Soichiro Hashiba** *Dark matter and baryon-number generation in quintessential inflation via hierarchical right-handed neutrinos*

12:20-13:35 Lunch

13:35-18:00 Afternoon session

Chair: Kipp Cannon

13:35-14:35 (**L**) **Konstantin Batygin** *Chaos and long-term dynamical evolution of planetary systems* Break (10 min)

14:45-15:00 **Ayako Ishii** Radiative Transfer Simulation for Early Emission from Binary Neutron Star Merger

15:00-15:15 Naoto Kuriyama Eruptive mass loss from progenitors of type Ibn/IIn Supernovae

15:15-15:30 **Conor Omand** Radio and Submillimetre Constraints on the Pulsar-Driven Supernova Model

Break (15 min)

15:45-16:00 **Yi-Peng Wu** Black hole mass function from peaks of primordial density perturbations

16:00-16:15 **Takumi Hayashi** Thermal effect of blackhole on Higgs instability

16:15-16:30 **Heather Fong** Searching for compact binaries using gravitational waves

16:30-16:45 **Atsushi Nishizawa** *All-sky distribution of stellar-mass binary black-hole mergers* Break (15 min)

17:00-18:00 (L) Patrick Brady Cosmic collisions - progress and prospects for gravitational-wave astronomy (1)

19:30- Dinner

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From the Solar System to the Universe

Aug. 25

7:00-9:00 Breakfast

9:00-12:35 Morning session

Chair: Jun'ichi Yokoyama

9:00-10:00 (L) Tanmay Vachaspati Cosmic Strings

Break (10 min)

10:10-11:10 (L) Patrick Brady Cosmic collisions - progress and prospects for gravitational-wave astronomy (2)

Break (10 min)

11:20-11:35 Haoxiang Lin Off-Axis Very-High-Energy Afterglows from Binary Neutron Star Mergers

11:35-11:50 Soichiro Morisaki Prompt and accurate sky localization of gravitational-wave sources

11:50-12:05 Takuya Tsutsui Rough rapid localization of GW source

12:05-12:20 Junya Kume Application of independent component analysis to KAGRA data

12:20-12:35 **Hiroaki Oota** Modelling Selection Biases in Searches for Gravitational Waves from Compact Object Collisions

12:35-19:00 Free discussion

19:00- Dinner

Aug. 26

7:00-9:00 Breakfast

9:00-12:20 Morning session

Chair: Kohei Kamada

9:00-10:00 (L) Patrick Brady Cosmic collisions - progress and prospects for gravitational-wave astronomy (3)

Break (10 min)

10:10-10:25 Daichi Tsuna Emission from Galactic Isolated Black Holes and Their Detectability

10:25-10:40 **Toshinori Hayashi** A strategy to search for an inner binary black hole from the motion of the tertiary star

PLANET²/RESCEU SUMMER SCHOOL 2019 From the Solar System to the Universe

- 10:45-10:55 **Saku Iwata** The diversity of young neutron stars determined by fallback accretion onto and energy deposition from the central object in supernova
- 10:55-11:10 **Takahiro Sudoh** *TeV Mysteries : coming solutions from HAWC* Break (15 min)
- 11:25-11:40 **Kana Moriwaki** *The cross-power spectrum between 21-cm and metal line emitters during early cosmic reionisation*
- 11:40-11:55 Minxi He Rotation and Formation Threshold of Primordial Black Holes
- 11:55-12:10 Takashi Hiramatsu Parasitic higher winding strings in Abelian-Higgs model
- 12:10-12:20 Toshikazu Shigeyama Closing

Posters

- Yuhiko Aoyama Requirements to emit observable hydrogen line in planetary gas accretion
- Kotaro Fujisawa Rapidly rotating sub-stellar objects
- Kohei Kamada Affleck-Dine magnetogenesis
- Kazumi Kashiyama The optically thick rotating magnetic wind from a massive white dwarf merger product
- **Yuting Lu** Systematic comparison of photometric and asteroseismic rotation periods of 33 Kepler stars with transiting planets
- Yuta Nakagawa Obliquity of an earth-like planet from photometric frequency modulation: time-frequency analysis of GCM simulation data for the Earth
- Toyokazu Sekiguchi Kinetic decoupling of wino dark matter and implications for indirect detection
- **Sho Shibata** Impact of resonance trapping of planetesimals during planetary migration on metallicities of close-in gas giants
- Daisuke Takaishi SPH simulation of the collapse of turbulent molecular cloud cores and star-disk alignment in the protoplanetary disks
- Yuki Takei A light curve model for type IIn supernovae
- Yusuke Yamada Horndeski model in supergravity