

APCosPA-Planet² RESCEU Summer School Program (ver. 2016/08/23)

Dates: 2016 August 24-28

Place: Garyu no Sato, Takayama city, Gifu pref., JAPAN

August 24

- 14:30-14:35 Yasushi Suto: Welcome address
14:35-14:45 Seiji Sugita: Core-to-core Planet²
14:45-16:15 (L) David Ehrenreich: Exoplanet observations from space
16:15-16:30 Break
16:30-18:00 (L) Gonjie Li: Obliquity Variations of Stars and Planets
18:00-19:00 Poster viewing
- 19:00- Dinner

August 25

- 7:00- 9:00 Breakfast
- 9:00-10:30 (L) Olivier Barnouin: Asteroid sample-return mission OSIRIS-REx and its perspectives for Solar-System evolution
- 10:30-10:40 Break
- 10:40-11:00 Yui Kawashima: Theoretical transmission spectra of transiting exoplanets with hazy atmospheres
- 11:00-11:20 Shunichi Kamada: Tidal interaction of satellite systems
- 11:20-11:40 Hikaru Yabuta: Dynamics observation of prebiotic microspheres through their chemical and morphological distributions: Attempt to define "Planetary Life"
- 11:40-13:00 Lunch
- 13:00-14:30 (L) Stefan Schröder: An overview for Rosetta mission and cameras for ESA's three landers (Huygens, Philae, and MASCOT)
- 14:30-14:40 Break
- 14:40-15:00 Moe Matsuoka: Space weathering simulation experiments of the Murchison CM2 chondrite with low-energy pulse laser irradiation
- 15:00-15:20 Naoyuki Hirata:
- 15:20-15:40 Break
- 15:40-17:10 (L) Seth Jacobson: From pebbles to planets: the story of the Solar System
- 17:10-17:20 Break
- 17:20-17:40 Masataka Aizawa: Searching for exoplanetary rings via transit photometry
- 17:40-18:00 Gen Chiaki: Numerical studies of star formation in metal-poor clouds
- 18:00-19:00 Poster viewing

19:00- Dinner

August 26

7:00- 9:00 Breakfast

9:00-10:30 (L) Tristan Guillot: Interiors and atmospheres of giant planets: Present status and perspectives with Juno

10:30-10:45 Break

10:45-12:15 (L) Salvatore Vitale: Characterization of compact objects with gravitational wave detections

12:15-13:30 Lunch

13:30- Free discussion

August 27

7:00- 9:00 Breakfast

9:00- 9:55 (L) Alexei Starobinsky: Recent results on R² and related models of inflation I

9:55-10:10 Soichiro Morisaki: Gravitational-wave data analysis using independent component analysis

10:10-10:25 Hsu-Wen Chiang: Easing Supernovae-CMB H₀ tension through local inhomogeneity

10:25-10:45 Break

10:45-11:00 Ryo Saito: Stars in Beyond Horndeski Theories

11:00-11:15 Sakine Nishi: Growing tensor perturbations on super horizon scales in Generalized Galilean Genesis

11:15-11:30 Yuki Watanabe: On post-inflation validity of perturbation theory in Horndeski scalar-tensor models

11:30-11:45 Yuki Sakakihara: Primordial fluctuations in bimetric gravity

11:45-12:00 Takahiro Hayashinaka: Quantum Anomalous Transportation of QED in Inflationary Universe

12:00-13:30 Lunch

13:30-14:25 (L) Robert Brandenberger: Approaches to Superstring Cosmology Preliminaries: Theory of cosmological perturbations

14:25-14:40 Kazufumi Takahashi: Relation between gauge fixing and DOFs in scalar-tensor theories

14:40-14:55 Daisuke Yoshida: Extended Vector-Tensor Theories

14:55-15:10 Junsei Tokuda: Statistical nature of infrared effects on de Sitter background

- 15:10-15:25 Yuichiro Tada: PBH Dark Matter in Supergravity Inflation Models
- 15:25-15:40 Ippei Obata: Oscillating Chiral Tensor Spectrum from Axionic Inflation
- 15:40-16:00 Break
- 16:00-16:15 Naritaka Oshita: Correspondence between the decoherence of infalling Hawking particles and quantum fluctuations during inflation
- 16:15-16:30 Yao-Chieh Hu: Two Interpretations of Thin-Shell Instanton
- 16:30-16:45 Stefano Ansoldi: On Tunnelling with Wormhole Creation
- 16:45-17:00 Atsuhisa Ota: Cosmological constraints from μ E cross-correlations
- 17:00-18:00 (L) Robert Brandenberger: Approaches to Superstring Cosmology II String Gas Cosmology
- 18:00-19:00 Poster viewing
- 19:00- Dinner

August 28

- 7:00- 9:00 Breakfast
- 9:00- 9:55 (L) Alexei Starobinsky: Recent results on R² and related models of inflation II
- 9:55-10:10 Yota Watanabe: Is DBI as fragile as other k-essence fields?
- 10:10-10:35 Yousuke Itoh: iKAGRA data analysis
- 10:35-10:55 Break
- 10:55-11:50 (L) Robert Brandenberger: Approaches to Superstring Cosmology III
Other approaches to superstring cosmology
- 11:50-12:05 Kazunari Eda: A chi-squared veto in semi-coherent F-statistic search for continuous gravitational wave

End of the summer school

Poster presentations

- Riouhei Nakatani: Photoevaporation of a protoplanetary disk
- Masamichi Akai: The depth distributions of TS and TOC in K/Pg boundary sediments, Neuquén basin, Argentina: Geographic comparison of the massive extinction effects
- Akari Shiino: Laser-induced fluorescence spectroscopy of Martian mineral analogues
- Tomohiro Takamatsu: Phase angle dependency of reflectance spectra of carbonaceous chondrites
- Misa Horiuchi: Elemental analysis using LIBS on Phobos
- Hiroki Horikoshi: Feasibility studies for the detection of atomic oxygen in exoplanetary exospheres with a UV space telescope
- Eri Tatsumi:
- Sunmyon Chon:
- Kenji Kurosaki: Thermal evolution of ice giants

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