

JGRG24 Program (version 141112)

Nov 10 (Mon)

10:30 - 10:45 opening [Shinji Mukohyama]

[session chair: Masahiro Kawasaki]

10:45 - 11:30 Mark Vagins (Kavli IPMU, Super-Kamiokande) “Zen and the Art of Gadolinium-Loaded Water Cherenkov Detectors”

11:30 - 11:45 Fuminobu Takahashi (Tohoku) “Inflation in Axion Landscape”

11:45 - 12:00 Naoya Kitajima (Tohoku) “Resonant conversions of QCD axions into hidden axions”

12:00 - 12:15 Ken’ichi Saikawa (Titech) “Axion dark matter from topological defects”

12:15 - 12:30 Taku Hayakawa (ICRR) “CDM/baryon isocurvature perturbations in a sneutrino curvaton model”

12:30 - 14:00 photo & lunch & poster view

[session chair: Jiro Soda]

14:00 - 14:45 Steven Gubser (Princeton) “Holographic Fermi surfaces from String Theory”

14:45 - 15:00 Yoske Sumitomo (KEK) “De Sitter Vacua from a D-term Generated Racetrack Uplift”

15:00 - 15:30 short poster talks (A01 - A19, 1 minute each)

15:30 - 16:00 coffee break & poster view

[session chair: Hideki Ishihara]

- 16:00 - 16:15 Shunichiro Kinoshita (Osaka City) “Electric field quench in AdS/CFT”
- 16:15 - 16:30 Keiju Murata (Keio) “Turbulent meson condensation in quark deconfinement”
- 16:30 - 16:45 Kenji Hotta (Hokkaido) “Brane-Antibrane and Closed Superstrings at Finite Temperature in the Framework of Thermo Field Dynamics”
- 16:45 - 17:00 Tsuyoshi Houru (Kobe) “An upper bound on the number of Killing-Yano tensors”
- 17:00 - 17:15 Laur Jarv (Tartu) “Invariant quantities in the scalar-tensor theories of gravitation”
- 17:15 - 17:30 Atsushi Taruya (YITP, Kyoto) “Nonlinear mode-coupling of large-scale structure : validity of perturbation theory calculation”
- 17:30 - 18:00 poster view

Nov 11 (Tue)

[session chair: Tetsuya Shiromizu]

- 09:30 - 10:15 Claudia de Rham (Case Western) “Cosmology and Massive Gravity”
- 10:15 - 10:30 Yasuho Yamashita (YITP, Kyoto) “Appearance of Boulware-Deser ghost in bigravity with doubly coupled matter”
- 10:30 - 10:45 Atsushi Naruko (Titech) “Cosmology in rotation-invariant massive gravity with non-trivial fiducial metric”
- 10:45 - 11:00 coffee break

[session chair: Ken-ichi Oohara]

- 11:00 - 11:15 Hayato Motohashi (Chicago) “Stability of self-accelerating solutions in extended quasidilaton massive gravity”
- 11:15 - 11:30 Daisuke Yoshida (Titech) “Covariant Stueckelberg analysis of dRGT massive gravity with a general fiducial metric”

- 11:30 - 11:45 Katsuki Aoki (Waseda) “Dark matter in ghost-free bigravity theory”
- 11:45 - 12:00 Yuki Sakakihara (Kyoto) “Tensor Spectrum in Bimetric Gravity”
- 12:00 - 12:15 Tatsuya Narikawa (Osaka) “Detectability of bi-gravity with graviton oscillations using gravitational wave observations”
- 12:15 - 12:30 Shinsuke Kawai (Sungkyunkwan) “Improvement of energy-momentum tensor and non-Gaussianities in holographic cosmology”

12:30 - 14:00 lunch & poster view

[session chair: Tomohiro Harada]

- 14:00 - 14:45 Andrzej Rostworowski (Jagiellonian) “Current status of the AdS (in)stability”
- 14:45 - 15:00 Masashi Kimura (DAMTP) “Higher-dimensional extremal Reissner-Nordström black holes are fragile”
- 15:00 - 15:30 short poster talks (B01 - B19, 1 minute each)

15:30 - 16:00 coffee break & poster view

[session chair: Ken-ichi Nakao]

- 16:00 - 16:15 Ryo Namba (Kavli IPMU) “Toward constructing ghost-free scalar-tensor theories beyond Horndeski”
- 16:15 - 16:30 Rio Saitou (YITP, Kyoto) “Structure of constraints of the theory beyond Horndeski”
- 16:30 - 16:45 Xian Gao (Titech) “Spatially covariant gravity and unifying framework for scalar-tensor theories of gravity”
- 16:45 - 17:00 Ryotaro Kase (Tokyo Science) “Effective field theory approach to modified gravity including Horndeski theory and Horava-Lifshitz gravity”
- 17:00 - 17:15 Tomotaka Kitamura (Waseda) “The Relation Between Tree Unitarity and Renormalizability in Lifshitz Scalar Theory”

17:15 - 18:00 poster view

Nov 12 (Wed)

[session chair: Takeshi Chiba]

09:30 - 10:15 Raffaele Flaminio (NAOJ, KAGRA) “Status and Prospect of Gravitational Waves detectors”

10:15 - 10:30 Kazunari Eda (RESCEU) “Multiple output configuration for a torsion-bar gravitational wave antenna”

10:30 - 10:45 Hirotaka Yoshino (KEK) “How to probe string axiverse with gravitational wave observations”

10:45 - 11:00 coffee break

[session chair: Yasusada Nambu]

11:00 - 11:15 Teruaki Suyama (RESCEU, Tokyo) “Black hole perturbation in modified gravity”

11:15 - 11:30 Ryotaku Suzuki (Osaka City) “Derivation of higher dimensional black holes in the large D limit”

11:30 - 11:45 Takahisa Igata (Kansai Gakuin) “Integrability of Particle System around a Ring Source as the Newtonian Limit of a Black Ring”

11:45 - 12:00 Kazufumi Takahashi (RESCEU) “Cosmological evolution of the chameleon field in the presence of a compact object”

12:00 - 12:15 Ayumu Terukina (Hiroshima) “Observational constraint on a generalized Galileon gravity model from the gas and shear profiles of a cluster of galaxies”

12:15 - 12:30 Atsuhisa Ota (TITech) “CMB μ distortion from primordial gravitational waves”

12:30 - 14:00 lunch & poster view

[session chair: Kunihiro Ioka]

14:00 - 14:45 Shigeru Yoshida (Chiba, IceCube) “The recent results from the IceCube neutrino observatory and their implications to the origin of ultra-high energy cosmic rays”

14:45 - 15:00 Kenta Kiuchi (YITP, Kyoto) “The simulation of magnetized binary neutron star mergers on K”

15:00 - 15:15 Kentaro Takami (Goethe) “Constraining the equation of state of neutron stars from binary mergers”

15:15 - 15:30 Motoyuki Saijo (Waseda) “Fragmentation Effects in Rotating Relativistic Supermassive Stars”

15:30 - 16:00 coffee break & poster view

[session chair: Yasufumi Kojima]

16:00 - 16:15 Marcus Werner (Kavli IPMU) “New views of gravitational magnification”

16:15 - 16:30 Takao Kitamura (Hirosaki) “Gravitational lensing in Tangherlini spacetime”

16:30 - 16:45 Kei Yamada (Hirosaki) “Linear Stability of the Post-Newtonian Triangular Solution to the General Relativistic Three-Body Problem”

16:45 - 17:00 Nami Uchikata (CENTRA) “Slowly rotating gravastars with a thin shell”

17:00 - 17:15 Naoki Tsukamoto (Fudan) “Particle Collision in Wormhole Spacetimes”

17:15 - 17:30 Takafumi Kokubu (Rikkyo) “Negative tension branes as stable thin shell wormholes”

17:30 - 18:00 poster view

18:30 - banquet

Nov 13 (Thu)

[session chair: Jun'ichi Yokoyama]

09:30 - 10:15 Francois Bouchet (IAP, Planck) “Latest results from the Planck collaboration”

10:15 - 10:30 Daisuke Yamauchi (RESCEU) “Constraining primordial non-Gaussianity via multi-tracer technique with Euclid and SKA”

10:30 - 10:45 Ichihiko Hashimoto (YITP, Kyoto) “Detecting primordial non-Gaussianity from the three-point statistics of halo and weak lensing fields”

10:45 - 11:00 coffee break

[session chair: Hideki Asada]

11:00 - 11:15 Yuki Watanabe (RESCEU) “Self-unitarization of New Higgs Inflation”

11:15 - 11:30 Naoyuki Takeda (ICRR) “No quasi-stable scalaron lump forms after R^2 inflation”

11:30 - 11:45 Masaki Yamada (ICRR) “Gravitational waves as a probe of supersymmetric scale”

11:45 - 12:00 Tomohiro Nakama (RESCEU) “Investigating tensor perturbations on small scales from their second-order effects to generate scalar perturbations”

12:00 - 12:15 Laura Castello Gomar (CSIC) “A unique Fock quantization for scalar fields in cosmologies with signature change”

12:15 - 12:30 Sakine Nishi (Rikkyo) “Generalized Galilean Genesis”

12:30 - 14:00 lunch & poster view

[session chair: Masahide Yamaguchi]

14:00 - 14:45 Leonardo Senatore (Stanford) “The Effective Field Theory of Cosmological Large Scale Structures”

14:45 - 15:00 Ipeei Obata (Kyoto) “Chromo - Multi Natural Inflation”

15:00 - 15:15 Guillem Domenech (Kyoto) “Conformal frame dependence of Inflation – scalar field with an exponential potential –”

15:15 - 15:30 Rajeev Kumar Jain (CP3) “Non-gaussian imprints of primordial magnetic fields from inflation”

15:30 - 16:00 coffee break & poster view

[session chair: Takahiro Tanaka]

16:00 - 16:15 Tomohiro Fujita (Kavli IPMU) “Can a Spectator Scalar Field Enhance Inflationary Tensor Modes?”

16:15 - 16:30 Taro Kunimitsu (RESCEU) “Large tensor mode and sub-Planckian excursion in generalized G-inflation”

16:30 - 16:45 Keisuke Harigaya (Kavli IPMU) “Lower bound on the tensor-to-scalar ratio in a nearly quadratic chaotic inflation model in supergravity”

16:45 - 17:00 Kohei Kamada (EPFL) “Cosmic string in the delayed scaling scenario and CMB”

17:00 - 17:15 Kohji Yajima (Rikkyo) “Gravitational waves from slow-roll inflation in Lorentz-violating Weyl gravity”

17:15 - 17:30 Tomohiro Harada (Rikkyo) “Black holes as particle accelerators: a brief review”

17:30 - 18:00 poster view

Nov 14 (Fri)

[session chair: Misao Sasaki]

10:00 - 10:45 Hitoshi Murayama (Berkeley/Kavli IPMU, SuMIRe) “TBA”

10:45 - 11:00 Takashi Hiramatsu (YITP, Kyoto) “Progress of code development: 2nd-order Einstein-Boltzmann solver for CMB anisotropy”

11:00 - 11:15 Tomo Takahashi (Saga) “Studying the inflationary Universe with gravitational waves”

11:15 - 11:30 coffee break

[session chair: Hideo Kodama]

11:30 - 11:45 Akihiro Ishibashi (Kinki) “Instability of extremal black holes in higher dimensions”

11:45 - 12:00 Hajime Sotani (NAOJ) “Stellar oscillations in Eddington-inspired Born-Infeld gravity”

12:00 - 12:15 Kazuharu Bamba (Ochanomizu) “Inflationary cosmology in R^2 gravity with quantum corrections”

12:15 - 12:30 Shuntaro Mizuno (Waseda) “Combined features in the primordial spectra induced by a sudden turn in two-field DBI inflation”

12:30 - 12:45 Guillermo A. Mena Marugan (IEM, CSIC) “Cosmological perturbations in Loop Quantum Cosmology: Mukhanov-Sasaki equations”

12:45 - 13:00 Yuko Urakawa (Nagoya) “Inflation from holography”

13:00 - 13:15 presentation awards

13:15 closing [Kei-ichi Maeda]

Short poster talk (1 minute each)

[Nov 10 (Mon) 15:00 - 15:30]

- A01 Kouta Iseki (Hirosaki) “Gravitational radiation reaction to the Lagrange’s solution of the three-body problem I: Reaction force”
- A02 Naoya Harada (Hirosaki) “Gravitational radiation reaction to the Lagrange’s solution of the three-body problem II: Orbital evolution”
- A03 Naoki Seto (Kyoto) “Probability distribution function for inclinations of merging compact binaries detected by gravitational wave interferometers”
- A04 Hirotaka Takahashi (Nagaoka U. of Tech.) “Hilbert-Huang Transform in Search for Gravitational waves”
- A05 Guillaume Lambard (IBS - CUP) “Dynamics of thick discs from a Schwarzschild-FRW Metric”
- A06 Shinya Tomizawa (Tokyo U. of Tech.) “Gravitational Faraday Effect for Cylindrical Gravitational Solitons”
- A07 Mao Iwasa (Kyoto) “Relativistic evolution of hierarchical triple systems”
- A08 Koji Izumi (Hirosaki) “Negative time delay of light by a gravitational concave lens”
- A09 Chisaki Hagiwara (Hirosaki) “Microlensing by an ultra-compact dark matter halo”
- A10 Kohkichi Konno (National Inst. of Tech., Tomakomai) “Blow-up behavior of Chern-Simons scalar field on the Kerr background”
- A11 Kouji Nakamura (NAOJ) “Recursive structure in the definitions of gauge-invariant variables for any order perturbations”
- A12 Chulmoon Yoo (Nagoya) “Spherical Domain Wall Shell Collapse in a Dust Universe”
- A13 Allan L. Alinea (Osaka) “Third Order Power Spectrum Using Uniform Approximation”
- A14 Nobuhiko Misumi (Osaka) “Some insights into the cosmological four point function”

- A15 Hiroshi Suenobu (Nagoya) “Numerical analysis of quantum cosmology”
- A16 Yukari Nakanishi (Osaka) “Adiabatic regularization of power spectrum for non-minimal k-inflation”
- A17 Jonathan White (RESCEU) “Open inflation and scalar suppression on large scales”
- A18 Yuhei Miyamoto (RESCEU) “Effects of thermal fluctuations at the end of thermal inflation”
- A19 Hajime Fukuda (Kavli IPMU) “Leptogenesis during axion inflation”

[Nov 11 (Tue) 15:00 - 15:30]

- B01 Tomohito Suzuki (Hirosaki) “MSCO: Part 1 Formulation”
- B02 Toshiaki Ono (Hirosaki) “MSCO: Part 2 Applications to exact solutions”
- B03 Hiroyuki Nakano (Kyoto) “Gravitational wave extraction from binary simulations”
- B04 Takahiro Tanaka (Kyoto) “On the creation of a baby universe”
- B05 Takashi Torii (Osaka Inst. of Tech.) “Stability of the wormholes in higher dimensional spacetime”
- B06 Hisaaki Shinkai (Osaka Inst. of Tech.) “Wormhole evolutions in n-dimensional Gauss-Bonnet gravity”
- B07 Yoshimune Tomikawa (Nagoya) “Wormhole on DGP brane”
- B08 Hideki Ishihara (Osaka City) “Charged multi-black strings in a five-dimensional Kaluza-Klein universe”
- B09 Daisuke Nitta (Nagoya) “Polarization of photons around black holes in non-minimally coupled Einstein-Maxwell theory”
- B10 Ken Matsuno (Osaka City) “Multi-black holes on Kerr-Taub-bolt space in five-dimensional Einstein-Maxwell theory”
- B11 Masaaki Takahashi (Aichi U. of Education) “Time Variability of a orbiting Hot Spot around a Black Hole”
- B12 Yasunari Kurita (Kanagawa Inst. of Tech.) “Hawking-Page phase transition in AdS_3 and extremal CFTs”

- B13 Kouichi Nomura (Kyoto) “Bimetric gravity and the AdS/CFT correspondence”
- B14 Taishi Katuragawa (Nagoya) “Anti-evaporation in bigravity”
- B15 Yosuke Misonoh (Waseda) “Black holes in non-projectable Horava-Lifshitz gravity”
- B16 Daiki Kikuchi (Hirosaki) “Relativistic Sagnac effect by CS gravity”
- B17 Masato Minamitsuji (IST, Lisbon) “Disformal transformation of cosmological perturbations”
- B18 Yuichi Ohara (Nagoya) “New model of massive spin-2 on curved space-time”
- B19 Seiju Ohashi (KEK) “Multi-scalar Extention of Horndeski Theory”