

News

WPI Support to Kavli IPMU Will Be Extended from FY 2017 for Five Years

On February 13, 2015, the Ministry of Education, Culture, Sports, Science and Technology (MEXT) announced the 2014 follow-up results of the WPI Program Committee. The Committee concluded that all five WPI centers selected in 2007 had achieved “World Premier Status,” fully meeting the goal of the WPI program; namely, advancing leading edge research, establishing international research environments, reforming research organizations, and creating interdisciplinary domains. Further, concerning a five-year extension of WPI support, the Committee decided that only truly exceptional cases could be considered for an extension. The Committee nominated the Kavli IPMU for a five-year extension starting from FY 2017 because its demonstrated achievements are far beyond the already very high WPI standard.

TODIAS Renamed to UTIAS

Effective as of April 1, 2015, the Todai Institutes for Advanced Study (TODIAS) has been renamed the University of Tokyo Institutes for Advanced Study (UTIAS). The TODIAS logo has also been changed to the UTIAS logo. The Japanese name

remains the same, however, as this renaming only reflects the change of English abbreviation of the University of Tokyo from “Todai” to “UTokyo.”

Eiichiro Komatsu Awarded the 2014 Chushiro Hayashi Prize

Eiichiro Komatsu, a Director of the Max Planck Institute for Astrophysics and a Visiting Senior Scientist of the Kavli IPMU, received the



Eiichiro Komatsu

2014 Chushiro Hayashi Prize for “Precision Cosmology Based on the Cosmic Microwave Background (CMB).” From 2001 to 2010, he worked as a key member of the WMAP team, leading data analysis and theoretical interpretation. He is the first author in some frequently-cited WMAP papers. For these reasons, his contribution to the development of astrophysics has been recognized.

The 6th Yoji Totsuka Prize to Tsuyoshi Nakaya and Masato Shiozawa

Tsuyoshi Nakaya, Professor of Kyoto University and Visiting Senior Scientist of the Kavli IPMU, and Masato Shiozawa, Professor of the Institute for Cosmic Ray Research, the University of Tokyo and Senior Scientist of the Kavli IPMU shared the 6th Yoji Totsuka Prize with Takashi Kobayashi, Professor of the Institute of Particle and Nuclear Studies, High Energy Accelerator Research Organization (KEK) for “the observation of electron neutrino



Tsuyoshi Nakaya



Masato Shiozawa

appearance in a muon neutrino beam” in the T2K long-baseline neutrino oscillation experiment.

Toshiyuki Kobayashi Awarded the 2015 JMSJ Outstanding Paper Prize

Toshiyuki Kobayashi, Professor of the Graduate School of Mathematical Sciences, the University of Tokyo, and Principal Investigator of the Kavli IPMU received



Toshiyuki Kobayashi

the 2015 JMSJ Outstanding Paper Prize. This prize is awarded to the authors of up to three outstanding articles published in the *Journal of the Mathematical Society of Japan (JMSJ)* in the previous year. Professor Kobayashi and his coauthors, J. Hilgert and J. Möllers, received this honor for their paper, “Minimal representations via Bessel operators,” which was published in *JMSJ* 66 (2014) 349-414.

WPI Institutes Jointly Participated in AAAS 2015 in San Jose, California

All nine WPI institutes jointly participated again this year in the 2015 AAAS (American Association for the Advancement of Science) Annual Meeting held for five days, February 12-16, 2015, in San Jose, California, with a theme of “Innovations, Information, and Imaging.” Similar to last year’s participation in Chicago, the WPI institutes for three days jointly ran the WPI booth, where each institute displayed a panel poster and brochures. At the WPI booth, MEXT (the Ministry of Education, Culture, Sports, Science and Technology) and JSPS (Japan Society for the Promotion of Science) officers in charge of the WPI program as well as officers from

eight WPI institutes including the Kavli IPMU welcomed visitors and explained to them the WPI program and the research activities and outcomes of the WPI institutes. In three days, nearly 400 people visited the WPI booth.

To date, the Kavli IPMU has joined AAAS Annual Meetings for four consecutive years from 2012, sending a few officers each time. The next AAAS Annual Meeting will be held in February 2016 in Washington, D.C.

Spring Science Camp for High School Students Held at the Kavli IPMU

For three days, March 25-27, 2015, "Spring Science Camp 2015: A Challenge to Unravel the Mystery of the Universe through Astronomy, Physics, and Mathematics" was held at the Kavli IPMU.

The Spring Science Camp 2015 is one of the projects supported by JST (Japan Science and Technology Agency) for next-generation S&T human resource development, providing hands-on experience for high school students. The three-day camp during spring break was held at 12 different host universities and private companies where cutting-edge research is conducted in a variety of fields. Each host provided a different program and accommodated 8 to 20 students (168 students in total). Students were directly guided by scientists and engineers working at the frontiers of S&T.

The participants in the Kavli IPMU program were 10 male and 10 female students selected from a highly competitive field of applicants from all over Japan. They learned cutting-edge research on unraveling the mystery of the Universe through lectures as well as exercises and an experiment by Kavli IPMU researchers in physics,

mathematics, and astronomy. In the evening after classroom learning, the students were given plenty of time to ask questions and to interact with lecturers and teaching assistants (undergraduate and graduate students). There were continued conversations with lecturers and teaching assistants on what students wanted to ask more regarding the lectures and exercises. Students also asked them about such topics as the life of university students and the life of researchers. In the afternoons, students joined the Kavli IPMU's everyday tea time and enjoyed chats with both Japanese and foreign researchers. On the last day, students presented what they had learned in the camp, and were given a certificate of completion.



Kavli IPMU Professor Masahiro Takada giving a lecture



A scene of astronomy exercises

Public Lecture on Recent Supernovae Research

On Sunday, March 29, 2015, the Kavli IPMU held a public lecture on recent supernovae research at the Yayoi Auditorium, Ichijo Hall on the University of Tokyo's Hongo campus. There were about 200 people in the audience. Supernovae research

is important in understanding the evolution of galaxies and the history of the expansion of the Universe, and it is one of the main research topics at the Kavli IPMU. At the public lecture, Kavli IPMU Principal Investigator, Professor Ken'ichi Nomoto, explained "What are supernovae?," Kavli IPMU Professor Mark Vagins discussed how to observe "Neutrinos from Supernova Explosions" in English with simultaneous interpretation into Japanese, and Kavli IPMU Assistant Professor Nao Suzuki spoke on the "Dark Energy Discovery Story." After the lecture, there was a tea break with the three lecturers, who answered a great number of questions asked by the audience.



Kavli IPMU Principal Investigator Ken'ichi Nomoto giving a lecture



Kavli IPMU Professor Mark Vagins giving a lecture



Kavli IPMU Assistant Professor Nao Suzuki answering questions

Kavli IPMU Seminars

1. "Singularities of Special Lagrangian Submanifolds"
Speaker: Yohsuke Imagi (Kavli IPMU)
Date: Sep 11, 2014
2. "Residue Formulas for Prepotentials, Instanton Expansions and Conformal Blocks"
Speaker: Andrei Marshakov (HSE)
Date: Sep 15, 2014
3. "Relativistic Integrable Systems, Quiver Representations, and Line Operators"
Speaker: Harold Williams (U Texas at Austin)
Date: Sep 16, 2014
4. "Progenitors of Core-Collapse Supernovae"
Speaker: Melina Bersten (Kavli IPMU)
Date: Sep 18, 2014
5. "Dissipative dynamics of cosmic inflation and some basic problems"
Speaker: Masahiro Morikawa (Ochanomizu U)
Date: Sep 24, 2014
6. "The environments and progenitors of supernovae: highlight on an integral field spectroscopy survey of supernova sites"
Speaker: Hanindyo Kuncarayakti (U Chile)
Date: Sep 25, 2014
7. "Positive representations and quantum higher Teichmuller theory"
Speaker: Ivan IP (Kavli IPMU)
Date: Sep 25, 2014
8. "EFT Beyond the Horizon: Stochastic Inflation and How Primordial Quantum Fluctuations Go Classical"
Speaker: Richard Holman (Carnegie Mellon U)
Date: Sep 26, 2014
9. "String Field Theory Solution for Any Open String Background"
Speaker: Theodore Erler (LMU Munich)
Date: Sep 30, 2014
10. "Project of Neutrino Mass Spectroscopy: Its theory and experimental progress"
Speaker: Motohiko Yoshimura / Noboru Sasao (Okayama U)
Date: Oct 01, 2014
11. "To what extent do we understand pulsars?"
Speaker: Koichi Hirotani (ASIAA)
Date: Oct 01, 2014
12. "Deformations of Superconformal Field Theories"
Speaker: Clay Cordova (Harvard U)
Date: Oct 02, 2014
13. "Holography of 3d-3d correspondence at large N"
Speaker: Gang Dongmin (Kavli IPMU)
Date: Oct 07, 2014
14. "Hilbert Series and Mass-deformed Brane Tilings"
Speaker: Rak-Kyeong Seong (KIAS)
Date: Oct 14, 2014
15. "Central extensions of the Ptolemy-Thompson group T from quantization of universal Teichmuller space"
Speaker: Hyun Kyu Kim (KIAS)
Date: Oct 15, 2014
16. "Entanglement Entropy and Lattices"
Speaker: Djordje Radicevic (Stanford U)
Date: Oct 16, 2014
17. "The Millennium Institute of Astrophysics MAS: Astronomy in the era of big data"
Speaker: Mario Hamuy (U Chile)
Date: Oct 16, 2014
18. "High cadence Transient Survey (HITS): real-time detection of supernovae and other transients with DECam"
Speaker: Francisco Forster (U Chile)
Date: Oct 16, 2014
19. "Higher Genus Gromov-Witten invariants and BCOV equations"
Speaker: Mauricio Romo (Kavli IPMU)
Date: Oct 16, 2014
20. "Latest results from AMS"
Speaker: Sadakazu Haino (Academia Sinica)
Date: Oct 17, 2014
21. "Photometric calibration of Wide field Imagers—Lessons from SNLS"
Speaker: Nicolas Regnault (LPNHE, IN2P3 CNRS)
Date: Oct 20, 2014
22. "Precision Cosmology with Type Ia Supernovae"
Speaker: Reynald Pain (LPNHE, Université Pierre et Marie Curie)
Date: Oct 20, 2014
23. "Spinning supermassive black holes"
Speaker: Benny Traktenbrot (ETH-Zurich)
Date: Oct 21, 2014
24. "Chern-Simons-matter theories and non-supersymmetric dualities in three dimensions"
Speaker: Djordje Radicevic (Stanford U)
Date: Oct 21, 2014
25. "An introduction to (p-adic) Langlands functoriality"
Speaker: Judith Ludwig (Imperial College London)
Date: Oct 21, 2014
26. "Phenomenology of the MOND alternative to dark matter"
Speaker: Mordehai Milgrom (Weizmann Institute in Rehovot)
Date: Oct 22, 2014
27. "The SNLS+SDSS hubble diagram"
Speaker: Marc Betoule (LPNHE)
Date: Oct 22, 2014
28. "The MESSIER satellite: unveiling galaxy formation"
Speaker: David Valls-Gabaud (Observatoire de Paris)
Date: Oct 23, 2014
29. "Large-Field and Open EFTs, Decoherence and Inflation"
Speaker: Cliff Burgess (McMaster U)
Date: Oct 23, 2014
30. "Quantum Entanglement of Local Operators"
Speaker: Masahiro Nozaki (YITP Kyoto)

- Date: Oct 24, 2014
31. "Dark Nuclear Physics"
Speaker: Matthew McCullough (CERN)
Date: Oct 27, 2014
32. "Dark Matter and Continuous Flavor Symmetries"
Speaker: Jure Zupan (CERN)
Date: Oct 27, 2014
33. "Bridgeland stability conditions on abelian threefolds"
Speaker: Dulip Piyaratne (Kavli IPMU)
Date: Oct 27, 2014
34. "Measuring Dark Energy to 1% Accuracy Using Cosmological Simulations"
Speaker: Alina Kiessling (JPL)
Date: Oct 28, 2014
35. "Electric Field Quench in AdS/CFT"
Speaker: Keiju Murata (Keio U)
Date: Oct 28, 2014
36. "International Linear Collider: Overview of Physics and Detectors"
Speaker: Tomohiko Tanabe (ICEPP) / Taikan Suehara (Kyushu U)
Date: Oct 29, 2014
37. "Recent Planck results and the future of CMB observations"
Speaker: Jacques Delabrouille (CNRS)
Date: Oct 29, 2014
38. "Indirect detection of dark matter with gamma rays: constraints and intriguing hints"
Speaker: Simona Murgia (UC Irvine)
Date: Oct 30, 2014
39. "Towards a Holographic Bose-Hubbard Model"
Speaker: Mitsutoshi Fujita (YITP Kyoto)
Date: Oct 30, 2014
40. "Search for Parity-odd signatures in the gamma ray sky"
Speaker: Hiroyuki Tashiro (Nagoya U)
Date: Oct 30, 2014
41. "Fourier-Sato transform, braid group actions, and factorizable sheaves"
Speaker: Vadim Schechtman (U Toulouse)
Date: Oct 30, 2014
42. "WFIRST and Euclid"
Speaker: Jason Rhodes (NASA JPL)
Date: Oct 31, 2014
43. "Self-Interacting Dark Matter from a Non-Abelian Hidden Sector"
Speaker: Tim Tait (UC Irvine)
Date: Oct 31, 2014
44. "Resurgence in quantum field theory: handling the Devil's invention"
Speaker: Aleksey Cherman (U Minnesota)
Date: Nov 04, 2014
45. "Measuring neutrino properties through relative flows"
Speaker: Ue-Li Pen (CITA)
Date: Nov 04, 2014
46. "Classification theorem for torsors over the sheaf of K-theory spaces"
Speaker: Sho Saito (Nagoya U)
Date: Nov 04, 2014
47. "Decoupling during Inflation and the presence of High Energy Physics in the CMB"
Speaker: Vicente Atal (Leiden U)
Date: Nov 05, 2014
48. "Core-collapsing supernovae — hybrid stars - quark matter connection"
Speaker: Andrei Yudin (ITEP, Moscow)
Date: Nov 05, 2014
49. "Cosmological magnetic fields from inflation and their non-Gaussian imprints"
Speaker: Rajeev Kumar Jain (U Southern Denmark)
Date: Nov 07, 2014
50. "Aspects of Galilean fields in curved spacetime"
Speaker: Kristan Jensen (YITP Stony Brook)
Date: Nov 11, 2014
51. "Higgs relaxation and leptogenesis"
Speaker: Alexander Kusenko (Kavli IPMU/UCLA)
Date: Nov 12, 2014
52. "Visible actions on generalized flag varieties"
Speaker: Yuichiro Tanaka (U Tokyo)
Date: Nov 13, 2014
53. "Multi-component dark matter from AMS-02"
Speaker: Da Huang (National Tsing Hua U)
Date: Nov 14, 2014
54. "Analytic torsion for Borcea-Voisin threefolds"
Speaker: Kenichi Yoshikawa (Kyoto U)
Date: Nov 17, 2014
55. "Gauge theories with rigid supersymmetry in $d=4, 5$ "
Speaker: Johannes Schmude (U Oviedo)
Date: Nov 18, 2014
56. "Constraints on axion in high scale inflation"
Speaker: Kwang Sik Jeon (IBS)
Date: Nov 19, 2014
57. "Knots And Quantum Theory"
Speaker: Edward Witten (IAS)
Date: Nov 20, 2014
58. "A New Look At The Gopakumar-Vafa Formula"
Speaker: Edward Witten (IAS)
Date: Nov 21, 2014
59. "Heavy element production in asymptotic giant branch stars"
Speaker: Amanda Karakas (ANU)
Date: Nov 25, 2014
60. "Conductivities in a holographic model of momentum relaxation"
Speaker: Keun-Young Kim (GIST)
Date: Nov 25, 2014
61. "The Tilting conjecture"
Speaker: Dennis Gaitsgory (Harvard U)
Date: Nov 26, 2014
62. "Higgs: Naturalness and some other issues"
Speaker: Anirban Kundu (U Calcutta)
Date: Nov 26, 2014
63. "The evolution of supernova progenitors"
Speaker: Sam Jones (U Victoria)
Date: Nov 27, 2014
64. "The Tilting conjecture"
Speaker: Dennis Gaitsgory (Harvard U)

- Date: Nov 27, 2014
65. "Impact of Nuclear Reactions on the Fate of Intermediate-mass Stars"
Speaker: Heiko Moller (Darmstadt)
Date: Nov 27, 2014
66. "Non-perturbative properties of large-scale structure formation and their implications to cosmology"
Speaker: Takahiro Nishimich (IAP)
Date: Nov 28, 2014
67. "Beauville's examples of irreducible symplectic manifolds and the cones conjecture of Kawamata and Morrison"
Speaker: Kota Yoshioka (Kobe U)
Date: Dec 01, 2014
68. "MApping the Most Massive Overdensity Through Hydrogen (MAMMOTH)"
Speaker: Zheng Cai (U Arizona)
Date: Dec 02, 2014
69. "Higher dimensional formal loop spaces"
Speaker: Benjamin Hennion (U Montpellier)
Date: Dec 03, 2014
70. "Structure formation with fast particles"
Speaker: Neal Dalal (U Illinois)
Date: Dec 04, 2014
71. "Derived varieties of complexes and Kostant's theorem for $gl(m, n)$ "
Speaker: Slava Pimenov (Yale U)
Date: Dec 04, 2014
72. "Geometry of 3-folds, and noncommutative deformations"
Speaker: Will Donovan (Kavli IPMU)
Date: Dec 08, 2014
73. "Spectral distortion of the Cosmic Background Radiation"
Speaker: Rashid Sunyaev (MPA)
Date: Dec 09, 2014
74. "CMB statistics"
Speaker: Wayne Hu (KICP)
Date: Dec 09, 2014
75. "Position-dependent power spectrum and the application to the BOSS DR10 CMASS sample"
Speaker: Chi-Ting Chiang (MPA)
Date: Dec 09, 2014
76. "Anomalous hydrodynamics kicks neutron stars"
Speaker: Matthias Kaminski (U Victoria)
Date: Dec 09, 2014
77. "Perturbation Theory"
Speaker: Wayne Hu (KICP)
Date: Dec 10, 2014
78. "Inflation"
Speaker: Wayne Hu (KICP)
Date: Dec 10, 2014
79. "The scientific goals of Spectrum-X/eRosita X-Ray observatory"
Speaker: Rashid Sunyaev (MPA)
Date: Dec 10, 2014
80. "CMB temperature and polarization phenomenology"
Speaker: Wayne Hu (KICP)
Date: Dec 11, 2014
81. "Hot gas in clusters of galaxies, CMB and cosmology"
Speaker: Rashid Sunyaev (MPA)
Date: Dec 11, 2014
82. "Nerve construction, A-infinity functors and homotopy theory of dg-categories"
Speaker: Giovanni Faonte (Yale U)
Date: Dec 11, 2014
83. "The role of gas flows in regulating star-forming galaxies"
Speaker: Nicolas Bouche (IRAP)
Date: Dec 12, 2014
84. "Q&A session with Prof. Rashid Sunyaev"
Speaker: Rashid Sunyaev (MPA)
Date: Dec 12, 2014
85. "D-modules and arithmetic: a theory of the b-function in positive characteristic"
Speaker: Thomas Bitoun (Higher School of Economics, Moscow)
Date: Dec 12, 2014
86. "Five-dimensional Gauge Theory Phases and Singularities"
Speaker: Shu-Heng Shao (Harvard U)
Date: Dec 16, 2014
87. "Probing the stop and Higgsinos at the LHC in Natural Supersymmetry"
Speaker: Chengcheng Han (APCTP)
Date: Dec 17, 2014
88. "Ground state degeneracy of non-Abelian topological order in open surfaces"
Speaker: Janet Ling-Yan Hung (Fudan U)
Date: Dec 18, 2014
89. "Is cosmological constant screened in Liouville gravity with matter?"
Speaker: Yu Nakayama (Caltech)
Date: Jan 06, 2015
90. "Flavor and Minimal SUSY GUT"
Speaker: Satoshi Shirai (DESY)
Date: Jan 07, 2015
91. "Anomalies, Chern-Simons Terms and Black Hole Entropy"
Speaker: Gim Seng Ng (Harvard U)
Date: Jan 07, 2015
92. "A holographic entanglement triptych"
Speaker: Mukund Rangamani (Durham U)
Date: Jan 08, 2015
93. "Redeeming 'Bad' theories holographically"
Speaker: Akikazu Hashimoto (U of Wisconsin)
Date: Jan 09, 2015
94. "From Ising spins to large N matrices"
Speaker: Dionysis Anninos (IAS)
Date: Jan 13, 2015
95. "Surface operators, Hitchin systems, and conformal field theory"
Speaker: Joerg Teschner (DESY)
Date: Jan 14, 2015
96. "The end of the dark ages"
Speaker: Aravind Natarajan (Kavli IPMU)
Date: Jan 15, 2015
97. "The homotopy theory of convenient dg-algebras"
Speaker: James Wallbridge (Kavli IPMU)
Date: Jan 15, 2015
98. "A theory of opers in positive

- characteristic and Joshi's conjecture"
 Speaker: Yasuhiro Wakabayashi (Kyoto U)
 Date: Jan 16, 2015
99. "The BV formalism for L_∞ -algebras"
 Speaker: Alexander Voronov (U Minnesota)
 Date: Jan 16, 2015
100. "Pure spinor superspace and nonabelian DBI action"
 Speaker: Xi Yin (Harvard U)
 Date: Jan 20, 2015
101. "Indirect Dark Matter Search with GAPS through cosmic-ray antiparticle measurements"
 Speaker: Hideyuki Fuke (JAXA)
 Date: Jan 21, 2015
102. "Coulomb branch and the moduli space of instantons"
 Speaker: Noppadol Mekareeya (CERN)
 Date: Jan 26, 2015
103. "Non-unitary holography"
 Speaker: Daniel Grumiller (TU Vienna)
 Date: Jan 27, 2015
104. "Large Field Inflation in String Theory"
 Speaker: Gary Shiu (UW Madison/HKUST)
 Date: Jan 28, 2015
105. "Stripping galaxies of their gas"
 Speaker: Bianca Poggianti (INAF)
 Date: Jan 30, 2015
106. "Towards a mathematical definition of Coulomb branches of 3d gauge theories"
 Speaker: Hiraku Nakajima (RIMS)
 Date: Feb 02, 2015
107. "Comments on BPS Solitons and Localization"
 Speaker: Heng-Yu Chen (NTU)
 Date: Feb 03, 2015
108. "Quantum Reduction of Couplings with Applications on Finite Unified Theories and the MSSM"
 Speaker: George Zoupanos (NTUA)
 Date: Feb 04, 2015
109. "On self-dual Yang-Mills theory"
 Speaker: Alexei Rosly (ITEP / HSE)
 Date: Feb 05, 2015
110. "Shintani descent and character sheaves on algebraic groups"
 Speaker: Tanmay Deshpande (IPMU)
 Date: Feb 05, 2015
111. "The hunt for relic galaxies"
 Speaker: Nacho Trujillo (IAC)
 Date: Feb 05, 2015
112. "SUSY Implications from WIMP Annihilation into Scalars at the Galactic Centre"
 Speaker: Anibal Medina (U Melbourne)
 Date: Feb 06, 2015
113. "Non-equilibrium Quantum Field Theory and cosmological applications"
 Speaker: Joao Rosa (Aveiro U)
 Date: Feb 06, 2015
114. "Neutrino Interactions at MINERvA"
 Speaker: Kevin McFarland (U Rochester)
 Date: Feb 09, 2015
115. "Prospects and status of Next-to-minimal SUSY"
 Speaker: Shoaib Munir (APCTP)
 Date: Feb 09, 2015
116. "Null category of morphism of relative dimension one"
 Speaker: Agnieszka Bodzenta (HSE)
 Date: Feb 09, 2015
117. "Non-equilibrium Quantum Field Theory and cosmological applications"
 Speaker: Joao Rosa (Aveiro U)
 Date: Feb 09, 2015
118. "Toward 3D integrability from quantum groups"
 Speaker: Atsuo Kuniba (U Tokyo)
 Date: Feb 10, 2015
119. "Non-equilibrium Quantum Field Theory and cosmological applications"
 Speaker: Joao Rosa (Aveiro U)
 Date: Feb 10, 2015
120. "Superconformal quantum mechanics from M2-branes"
 Speaker: Tadashi Okazaki (Osaka U / Caltech)
 Date: Feb 12, 2015
121. "Interaction with hydrogen-less envelopes as the least energetic model for a bulk of Type I Superluminous Supernovae"
 Speaker: Elena Sorokina (Lomonosov Moscow State U)
 Date: Feb 12, 2015
122. Dbar-superconnections on compact and non-compact complex manifolds"
 Speaker: Alexey Bondal (Kavli IPMU)
 Date: Feb 12, 2015
123. "Study a collimated muons for the degenerated SUSY scenario"
 Speaker: Myeonghun Park (APCTP)
 Date: Feb 16, 2015
124. "ADHM revisited: Instantons, Wilson lines and D-branes"
 Speaker: Kenny Wong (U Cambridge)
 Date: Feb 16, 2015
125. "Secrets of the Higgs Boson"
 Speaker: Michael E Peskin (SLAC)
 Date: Feb 18, 2015
126. "Investigations on photon-pair cascades from nearby blazars"
 Speaker: Mariana Orellana (Universidad Nacional de Río Negro)
 Date: Feb 19, 2015
127. "On cylinders on cubic hypersurfaces"
 Speaker: Ilya Karzhemanov (Kavli IPMU)
 Date: Feb 19, 2015
128. "The supersymmetric nonlinear sigma model as a geometric variational problem"
 Speaker: Volker Branding (TU Vienna)
 Date: Feb 24, 2015
129. "Higher-dimensional unification

- with continuous and fuzzy coset spaces as extra dimensions”
Speaker: George Zoupanos (NTUA)
Date: Feb 25, 2015
130. “The cosmic growth of the active black hole population out to $z=2$ ”
Speaker: Andreas Schulze (Kavli IPMU)
Date: Feb 26, 2015
131. “Recent status of the SuperKEKB accelerator control system”
Speaker: Masako Iwasaki (KEK)
Date: Mar 09, 2015
132. “Effects of non-self-annihilating dark matter on stellar objects”
Speaker: Leung Shing Chi (The Chinese U of Hong Kong)
Date: Mar 10, 2015
133. “Elliptic genus of phases of $N=2$ theories”
Speaker: Anatoly Libgober (U Illinois, Chicago)
Date: Mar 10, 2015
134. “An LG-LG mirror theorem”
Speaker: Yefeng Shen (Stanford U)
Date: Mar 11, 2015
135. “What do the star formation histories of galaxies look like?”
Speaker: Camilla Pacifici (Yonsei U Observatory)
Date: Mar 12, 2015
136. “The Eynard-Orantin recursion for simple singularities”
Speaker: Todor Milanov (Kavli IPMU)
Date: Mar 12, 2015
137. “Metal-free pair-instability supernova progenitors with large mass loss”
Speaker: Takashi Moriya (AIFA, U Bonn)
Date: Mar 16, 2015
138. “Toric mirror symmetry via shift operators”
Speaker: Hiroshi Iritani (Kyoto U)
Date: Mar 16, 2015
139. “Studying the Expansion of the Universe with quasar spectra”
Speaker: Andreu Font-Ribera (LBL)
Date: Mar 17, 2015
140. “Toric mirror symmetry via shift operators”
Speaker: Hiroshi Iritani (Kyoto U)
Date: Mar 17, 2015
141. “Lepton-flavor-violating Higgs decay $h \rightarrow \mu\tau$ and muon anomalous magnetic moment in a general two Higgs doublet model”
Speaker: Kazuhiro Tobe (Nagoya U)
Date: Mar 18, 2015
142. “Holography for Hadron Scattering in the Regge Kinematics”
Speaker: Taizan Watari (Kavli IPMU)
Date: Mar 19, 2015
143. “A south Hemisphere prospective on Dark Matter”
Speaker: Elisabetta Barberio (U Melbourne)
Date: Mar 20, 2015
144. “The Coulomb branch of 3d $N=4$ theories”
Speaker: Tudor Dimofte (IAS)
Date: Mar 23, 2015
145. “Inequalities from Poisson brackets”
Speaker: Irina Davydenkova (U Geneva)
Date: Mar 23, 2015
146. “ADE Little String Theory and Triality”
Speaker: Mina Aganagic (UC Berkeley)
Date: Mar 24, 2015
147. “Knots and Mirror Symmetry”
Speaker: Mina Aganagic (UC Berkeley)
Date: Mar 24, 2015
148. “An area law for cosmology”
Speaker: Raphael Bousso (UC Berkeley)
Date: Mar 26, 2015
149. “Machine-learning Inference of Fundamental Stellar Parameters From Large Photometric Surveys”
Speaker: Adam Miller (Caltech)
Date: Mar 26, 2015
150. “Fast Radio Bursts (FRBs)”
Speaker: Shri Kulkarni (Caltech)
Date: Mar 27, 2015
151. “Interstellar dust and its modelling”
Speaker: Ranjan Gupta (IUCAA, Pune)
Date: Mar 30, 2015
152. “The A_∞ structure from the Berkovits formulation of open superstring field theory”
Speaker: Yuji Okawa (U Tokyo)
Date: Mar 31, 2015

Kavli IPMU Komaba Seminar

1. “Donaldson-Thomas theory for Calabi-Yau fourfolds”
Speaker: Naichung Conan Leung (The Chinese U of Hong Kong)
Date: Nov 25, 2014

Personnel Changes

Moving Out

The following people left the Kavli IPMU to work at other institutes. Their time at the Kavli IPMU is shown in square brackets.

Kavli IPMU postdoctoral fellow Nobuhiro Okabe [September 1, 2013 – March 31, 2015] moved to the Graduate School of Science, Hiroshima University, as an Assistant Professor.

JSPS postdoctoral fellow Koichi Nagasaki [April 1, 2014 – March 31, 2015] moved to the Institute of Particle and Nuclear Studies, KEK, as a research fellow.

Also, JSPS postdoctoral fellow Hiroshi Takano [April 1, 2014 – March 31, 2015] was appointed as a support scientist at the Kavli IPMU.

Erratum to the Printed Version of the *Kavli IPMU News* No. 28

On page 14, at the bottom of the middle column, “Poincare” should read “Pasteur.” (This erratum does not apply to the web version of the *Kavli IPMU News* No. 28.)