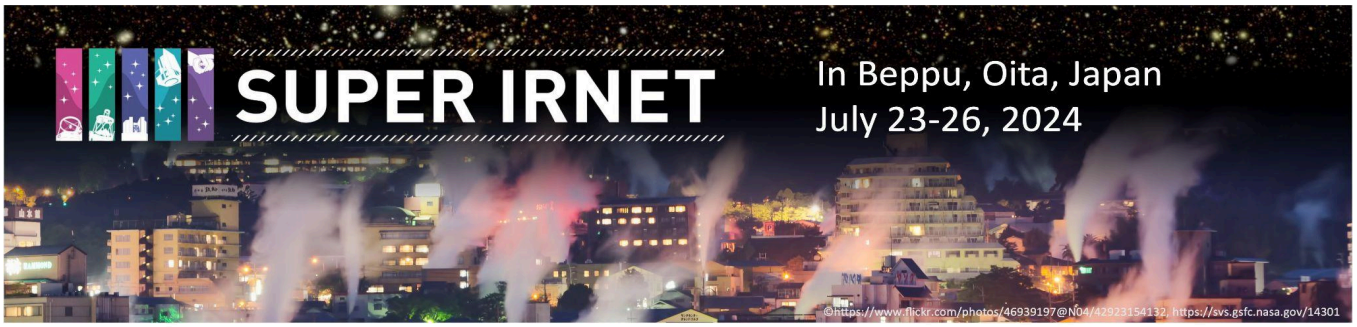


The Second SUPER-IRNET Workshop
~ Sparkling Our Collaboration at the Cosmic Gate~

Date: July 23rd - 26th, 2024 (in Japan time)
Venue: B-Con Plaza, Beppu, Oita, Japan
Room: International Conference Room

Workshop Program (ver. July 13, 2024)

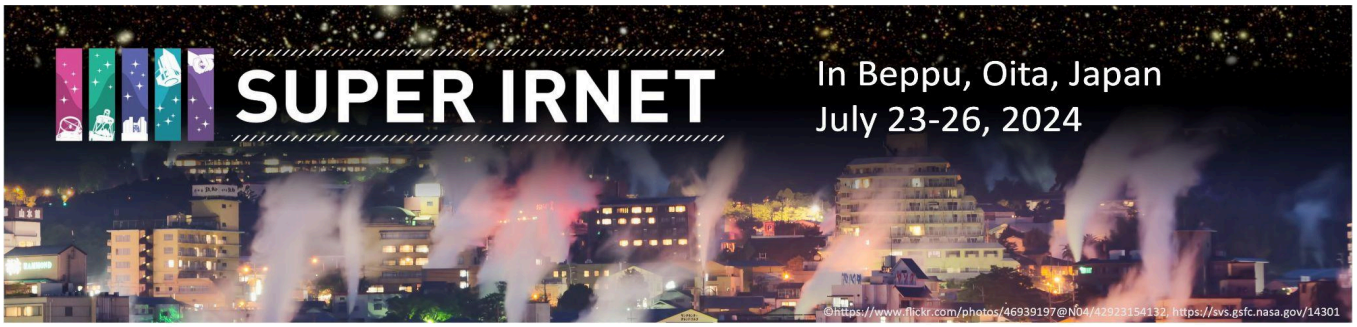
(I) : invited talk / (*): remote talk

♨ July 23 (Day1):

[Introduction]
13:00-13:05 Opening Remarks
Michitoshi Yoshida (NAOJ)
13:05-13:15 SUPER-IRNET status report
Yusei Koyama (Subaru Telescope)

[SWIMS session]
13:15-13:30 "*SWIMS and TAO: overview and project status*"
Masahiro Konishi (Univ. of Tokyo)
13:30-13:45 "*Dusty Star-forming or Environmental Quenching? — SWIMS NB1244 Unveils the Hidden Formation inside a 50Mpc Supercluster*"
Zhaoran Liu (Tohoku Univ)
13:45-14:00 "*Dual narrow-band imaging of a protocluster at cosmic noon with SWIMS-18*"
Kazuki Daikuhara (Tohoku University)
14:00-14:15 "*SWIMS strategic observations toward Euclid quasars in the cosmic dawn*"
Yoshiki Matsuoka (Ehime Univ)
14:15-14:30 "*SWIMS-IFU: wide-field near-infrared integral field unit for SWIMS*"
Kosuke Kushibiki (Univ. of Tokyo)

14:30-15:00 (coffee break + poster viewing)



[General Science: Galaxies and Active Galactic Nuclei]

15:00-15:15 "*Wide field search for super massive black holes in a rapid growth phase*"
Masayuki Akiyama (Tohoku Univ)

15:15-15:30 "*Cosmic Himalayas: A Possible Synergy with SUPER-IRNET for Understanding the Densest Quasars at Cosmic Noon*"
Yongming Liang (ICRR, Univ. of Tokyo)

15:30-15:45 "*Investigating the Merger-AGN Connection within HSC-SSP*"
Kiyoaki Omori (Ehime Univ)

15:45-16:00 "*Unveiling heavily obscured SMBH growth in the early universe*"
Naoki Matsumoto (Tohoku Univ)

16:00-16:15 "*Katachi (形): Decoding the Imprints of Past Star Formation on Present-Day Morphology in Galaxies with Interpretable CNNs*"
Juan Pablo Alfonzo (Tohoku Univ)

16:15-16:35 (coffee break + poster viewing)

[Euclid session]

16:35-16:55 "*Euclid Early Release Observations: first science results*"
Jean-Charles Cuillandre [I][*] (CEA, Paris-Saclay)

16:55-17:15 "*Euclid Operations*"
Reiko Nakajima [I][*] (Bonn Univ)

17:15-17:30 "*Unlocking the Golden Age of Survey Astronomy With Joint Processing*"
Jason Rhodes (NASA JPL)

17:30-17:45 "*NASA/IPAC Infrared Science Archive support for deep and wide near-infrared surveys*"
Harry Teplitz (Caltech/IPAC)

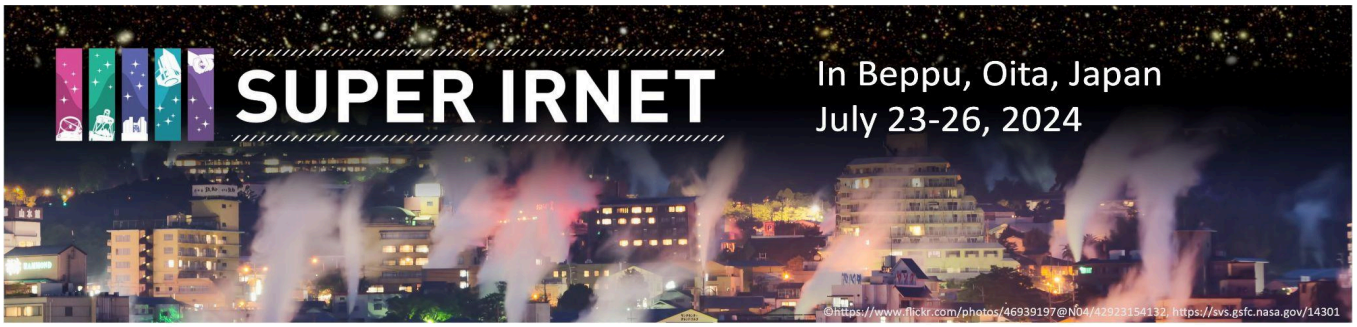
♨ July 24 (Day2)

[ULTIMATE session (I)]

09:00-09:15 "*ULTIMATE-Subaru Project overview and current status*"
Yosuke Minowa (Subaru Telescope)

09:15-09:30 "*WFI : Wide Field Imager for the ULTIMATE Subaru*"
Kentaro Motohara (NAOJ)

09:30-09:45 "*ULTIMATE development plan in ASIAA*"
Shiang-Yu Wang (ASIAA)



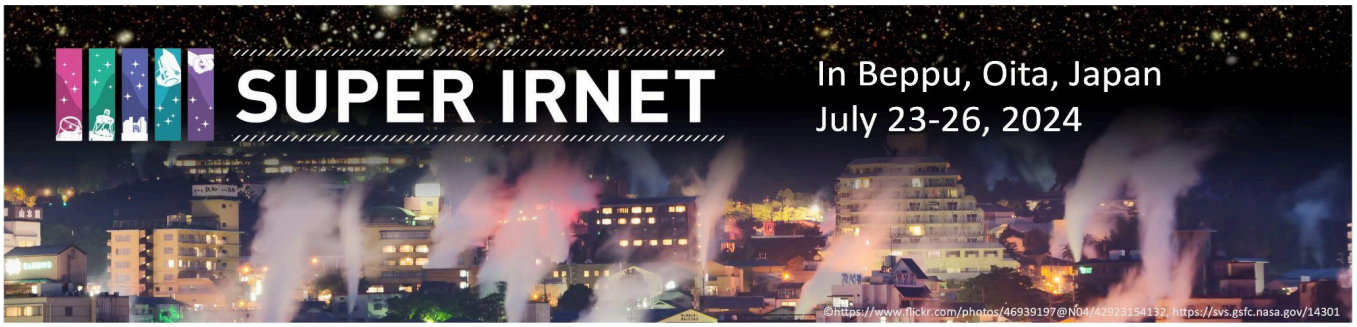
09:45-10:00 "*Wide-field high-z galaxy surveys with ULTIMATE/Subaru and a future space mission GREX-PLUS*"
Akio Inoue (Waseda Univ)
10:00-10:15 "*ULTIMATE-Subaru: NB-survey at Cosmic Noon* "
Tomoko Suzuki (Kavli IPMU)
10:15-10:30 "*Time domain astronomy with ULTIMATE-Subaru*"
Takashi Moriya (NAOJ)

10:30-11:00 Coffee Break

[ULTIMATE session (II)]
11:00-11:20 "*Nearby galaxy sciences with ULTIMATE-Subaru*"
Sakurako Okamoto [I] (NAOJ)
11:20-11:35 "*ULTIMATE-Subaru/WFI Galactic Plane Survey*"
Kumiko Morihana (NAOJ)
11:35-11:50 "*Population and structure survey of the Galactic plane using narrow- and medium-band filters*"
Hiroki Onozato (NAOJ)
11:50-12:05 "*Star formation science with ULTIMATE-Subaru*"
Yuhei Takagi (NAOJ)
12:05-12:20 "*Galactic center survey with ULTIMATE*"
Daisuke Suzuki (Osaka Univ)

12:20-14:15 Lunch + poster viewing

[General Science: Galaxies and Cosmology (I)]
14:15-14:30 "*Evaluating baryonic effects in HSC Y3 cosmic shear data on small scales and prospects for Euclid, Roman, and LSST*"
Ryo Terasawa (Kavli IPMU)
14:30-14:45 "*An elaborate time lapse of CMB lensing up to z~2*"
Shun Arai (KMI, Nagoya Univ)
14:45-15:00 "*The construction of analytical methods for testing GR with weak lensing and galaxy clustering from HSC-Y3 and SDSS BOSS*"
Kohki Tanida (Nagoya Univ)
15:00-15:15 "*Breaking the natural barrier: how reliable is cluster detection beyond z = 1.4?*"
Rogerio Monteiro-Oliveira (ASIAA)



15:15-15:30 "*Exploring Relationship between Assembly bias and Halo properties toward Dark Emulator II*"
Keitaro Ishikawa (Nagoya Univ)
15:30-15:45 "*Simulation-based Inference for Cluster Cosmology and Weak Lensing Mass Calibration*"
Sut-Ieng Tam (ASIAA)

15:45-16:15 (coffee break + poster viewing)

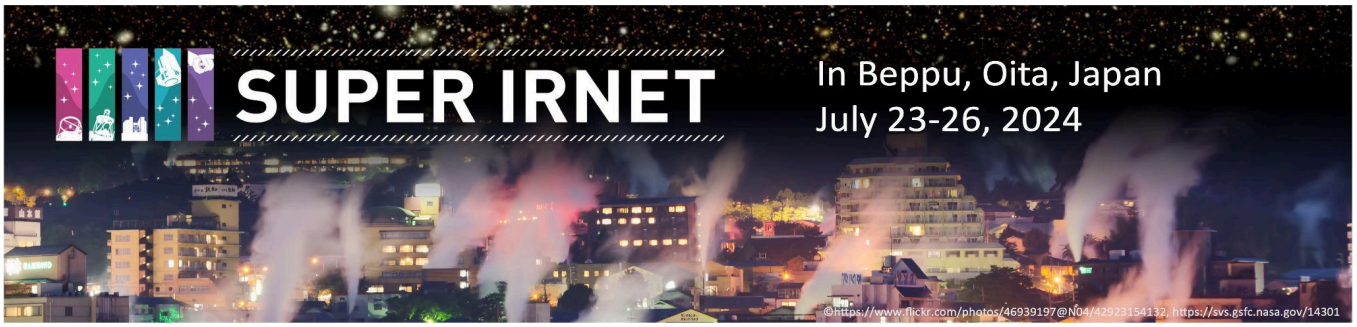
[Special Session 1: Diversity & Equality]
16:15-16:55 "*Don't assume! The value of diversity and making an inclusive environment for sexual minorities in STEM*"
Euan McKay (Nagoya Univ)
16:55-17:35 "Shattering the glass universe: inclusivity in ASTRO 3D"
Tayyaba Zafar (Macquarie Univ)
17:35-17:50 Discussion

[19:00- Social Event (Banquet)]

♨ July 25 (Day3)

[PRIME session]
9:00-9:15 "*Status of PRIME NIR telescope*"
Takahiro Sumi (Osaka Univ)
9:15-9:30 "*JASMINE: an infrared space facility for precise measurements*"
Ryou Ohsawa (NAOJ)
9:30-9:45 "*Mira variable stars for tracing stellar populations in the Galactic bulge*"
Noriyuki Matsunaga (Univ. of Tokyo)
9:45-10:00 "First light PRIMECAM experience"
Alexander Kutyrev [*] (NASA GSFC/UMd)
10:00-10:15 "*Development of the South Africa Near-infrared Doppler (SAND) instrument*"
Aoi Takahashi [I] (JAXA/ISAS)
10:15-10:30 "*Nonlinearity correction for PRIME's detector H4RG*"
Ryusei Hamada (Osaka Univ)

10:30-11:00 (coffee break + poster viewing)



[Special Session 2: MB filter science]

11:00-11:20 "*HSC medium band survey*"
Atsushi Nishizawa [I] (Gifu shotoku University)

11:20-11:40 "*Large scale structures and galaxy populations across cosmic time traced by medium and narrow band filters*"
Tadayuki Kodama [I] (Tohoku Univ)

11:40-11:55 "*Ruby-Rush: Investigating massive quiescent galaxies at z~5 with SWIMS-18*"
Kosuke Takahashi (Tohoku Univ)

11:55-12:10 "*A comprehensive analysis of Hα Emitters at z~2.3 from the Broad- and Medium-band Photometry*"
Nuo Chen (Univ. of Tokyo)

12:10-12:25 "*Introduction to the 7-Dimensional Telescope: Current Status and Survey Plan*"
Ji Hoon Kim (Seoul National University)

((Free Afternoon))

♨ July 26 (Day4)

[General Science: Galaxies and Cosmology (II)]

09:00-09:20 "*Studying inside-out vs. outside-in quenching using multi-band photometry*"
Lihwai Lin [I] (ASIAA)

09:20-09:35 "*Resolved stellar population of galaxies in a protocluster core at z ~ 3*"
Mariko Kubo (Tohoku Univ)

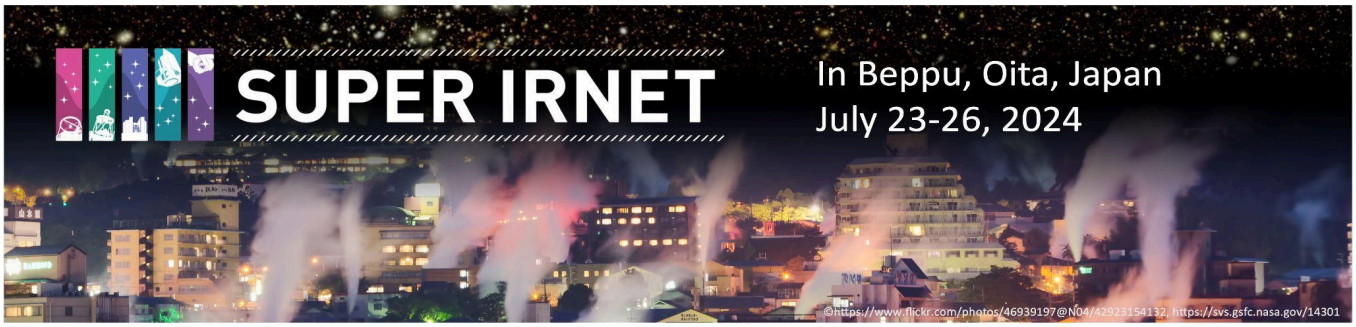
09:35-09:50 "*Mapping the Large Scale Structure and Environmental Dependence of Star Forming and Morphology*"
Ronaldo Laishram (Tohoku Univ)

09:50-10:05 "*Environmental dependence of gas-phase metallicities and outflows implied for galaxies residing in a cosmic noon cluster core*"
Kota Adachi (Tohoku Univ)

10:05-10:20 "*Probing the cosmic web with FRBs*"
Sunil Simha (UC Santa Cruz)

10:20-10:35 "SPHEREx Ice Sources and IRTF spectra"
Ho-Gyu Lee (KASI)

10:35-11:00 (coffee break + poster viewing)



[Roman session (I)]

11:00-11:20 "NASA's Roman Space Telescope"
Julie McEnery [I] (NASA/GSFC)

11:20-11:35 "*OpenUniverse: Simulated mocks and images for Stage IV surveys*"
Alina Kiessling (NASA/JPL)

11:35-11:50 "*Multi-wavelength Cosmological Simulations for Stage-IV Surveys*"
Ken Osato (Chiba Univ)

11:50-12:05 "*PFS for Photometric Redshift Training and Calibration: Synergies with Roman and Beyond*"
Jeff Newman (University of Pittsburgh / PITT PACC)

12:05-13:45 Lunch

[Roman session (II)]

13:45-14:00 "*Cosmic Dawn with Roman and Subaru*"
James Rhoads [*] (NASA/GSFC)

14:00-14:15 "*Studying the Cosmic Dawn at z>10 with Roman*"
Yuichi Harikane (Univ. of Tokyo)

14:15-14:30 "*Star-formation at Cosmic Noon with Roman + Subaru spectroscopy*"
Sangeeta Malhotra (NASA/GSFC)

14:30-14:50 "*Free-floating planet mass function from the MOA-II survey and expectations for Roman, Euclid, and PRIME*"
Naoki Koshimoto [I] (Osaka Univ)

14:50-15:05 "*Toward the host star mass dependence of the planet frequency in Roman era*"
Kansuke Nunota (Osaka Univ)

15:05-15:20 "*Building the largest mock catalogue of the Milky Way centre in the Near Infrared*"
Pau Ramos (NAOJ)

15:20-15:50 Coffee Break

[Future & Discussion]

15:50-16:25 Discussion

16:25-16:30 Concluding Remarks