



# The Final SUPER-IRNET Workshop

## ~ Beyond the SUPER, Toward the Future ~

Date: March 16 - 19, 2026 (in Japan time)

Venue: University of Osaka, Nakanoshima-Center, Osaka, Japan

### Workshop Program (ver. February 18, 2026)



#### March 16 (Day1):

**13:00-13:15** “SUPER-IRNET Full 5-Years Report, Toward the Future”  
Yusei Koyama (NAOJ)

**13:15-13:30** “SWIMS for TAO: Current Status and Project Update”  
Masahiro Konishi (Univ. of Tokyo)

**13:30-13:45** “ULTIMATE-Subaru: Current Status and GLAO Final Design”  
Yosuke Minowa (NAOJ)

**13:45-14:00** “Wide Field Imager (WFI) for ULTIMATE-Subaru”  
Kosuke Kushibiki (NAOJ)

**14:00-14:15** “The ULTIMATE development activities in ASIAA”  
Shiang-Yu Wang (ASIAA)

**14:15-14:30** “NINJA: Near-INfrared and optical Joint spectrograph with Adaptive optics”  
Michitoshi Yoshida (NAOJ)

**14:30-14:45** “Current Status and Future Prospects of ULTIMATE-START : A Laser Tomography Adaptive Optics System for the Subaru Telescope”  
Aino Narayama (Tohoku University)



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**14:45-15:00** “*Development of Image Signal Processor for Adaptive Optics using FPGA*”  
Mitsuaki Takahashi (Tohoku University)

15:00-15:30 Coffee Break

**15:30-15:45** “*PRIME Microlensing Exoplanet Survey: 2025 Season*”  
Takahiro Sumi (Osaka University)

**15:45-16:00** “*PRIME All-Sky Grid Analysis Progress and Update on Image Analysis*”  
Ryusei Hamada (Osaka University)

**16:00-16:20** “*France - Japan Potential Collaborations*”  
Denis Burgarella (Laboratoire d'Astrophysique de Marseille) [!]

**16:20-16:35** “*Transformation of Quiescent Galaxies in the Cluster Core at  $z=1.52$  from the Euclid First Quick Release*”  
Ko Ishida (Tohoku Univ)

**16:35-16:55** “*UNIONS/Euclid AGN science*”  
Kohei Ichikawa (Tohoku Univ) [!]

**16:55-17:10** “*ULTIMATE-Subaru: Probing Cosmic Reionization with Wide-Field Near-Infrared Narrowband Imaging*”  
Daichi Kashino (NAOJ)

**17:10-17:30** “*NASA Plans for the Golden Age of Astronomy Surveys*”  
Jason Rhodes (NASA JPL) [!]



## March 17 (Day2)

**09:30-09:45** *“Panoramic views of galaxy and AGN formation in the early Universe explored by narrow/medium-band imaging with ULTIMATE and SWIMS”*

Tadayuki Kodama (Tohoku University)

**09:45-10:00** *“Ruby-Rush: Exploring massive quiescent galaxies with SWIMS and ULTIMATE”*

Kosuke Takahashi (Tohoku University)

**10:00-10:15** *“Physical mechanisms driving both enhanced and suppressed star formation at cosmic noon”*

Hayate Hagiwara (Tohoku University)

**10:15-10:30** *“Co-evolution of massive black holes and their host galaxies with wide-field surveys”*

John Silverman (Kavli IPMU)

**10:30-10:50** *“Future Aspects for SWIMS/ULTIMATE-Subaru Medium-Band filters: Quantifying Expected Improvements with 10,000+ Mock Galaxies”*

Nuo Chen (Tohoku University) [!]

**10:50-11:20** Coffee Break

**11:20-11:35** *“Cartography at the Cosmic Extremes: Mapping the 100 cMpc-scale “Cosmic Himalayas” at  $z=2.2$ ”*

Yongming Liang (ICRR, University of Tokyo)

**11:35-11:50** *“Environmental dependence of chemical enrichment across cosmic noon probed by NIR spectroscopy of high- $z$  overdensities”*

Kota Adachi (Tohoku University)

**11:50-12:05** *“Statistical properties of quiescent galaxies at high redshift revealed by JWST”*

Kei Ito (Cosmic Dawn Center, Technical University of Denmark)

**12:05-12:25** *“Probing the Most Pristine Sources in the Era of JWST, Roman, and ULTIMATE”*

Takahiro Morishita (Caltech/Tohoku University) [!]



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12:25-13:45 Lunch Break

**13:45-14:00** “Near-Field Cosmology with *ULTIMATE*, *Euclid*, and *Roman*”  
Sakurako Okamoto (Subaru, NAOJ)

**14:00-14:15** “Revealing the 3D Dynamics of Milky Way Dwarf Galaxies with Next-Generation Surveys”  
Kohei Hayashi (NIT, Sendai College)

**14:15-14:30** “Wide-field Photometric Studies of Stellar Halos in Nearby Galaxies with *HSC* and Near-Infrared Imaging”  
Itsuki Ogami (NAOJ)

**14:30-14:45** “Synergistic Surveys toward the Galactic Center in the *SUPER IRNET 2.0* Era”  
Daisuke Suzuki (Osaka University)

**14:45-15:00** “Search for pulsating stars in the Galactic bulge with *PRIME*”  
Noriyuki Matsunaga (University of Tokyo)

**15:00-15:20** “TBD”  
Eleonora Troja (University of Rome Tor Vergata) [I]

15:20-15:50 Coffee Break

**15:50-16:05** “High-redshift transient surveys”  
Takashi Moriya (NAOJ)

**16:06-16:15** “Star formation sciences with *ULTIMATE-Subaru II*”  
Yuhei Takagi (Subaru, NAOJ)

**16:15-16:20** “*NIR* survey for brown dwarfs and planetary-mass objects in the star-forming regions”  
Yumiko Oasa (Saitama University)

**16:20-16:40** “*ULTIMATE-Subaru* Galactic Plane Survey and its Synergy with the *Roman* Space Telescope”  
Kumiko Morihana (Subaru, NAOJ) [I]



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**16:40-16:55** “*JASMINE: Japan Astrometry/photometry Satellite Mission for INfrared Exploration*”  
Ryouhei Kano (NAOJ)

**16:55-17:10** “*The JASMINE astrometric solvers: 2 ways to achieve sub-miliarcsecond precision*”  
Pau Ramos (NAOJ)

**17:10-17:25** “*GREX-PLUS*”  
Yuichi Harikane (University of Tokyo)

**17:25-17:40** “*Enhancing SUPER-IRNET Science with PRIMA: Synergies Between Near- and Far-Infrared Wide-Field Surveys*”  
Hanae Inami (Hiroshima University)



## **March 18 (Day3)**

**09:30-09:50** “*ULTIMATE-Subaru as the Missing Link: Wide-Field IFU Physics Between Roman/Euclid Discovery and JWST Spectroscopy*”

Themiya Nanayakkara (Swinburne University of Technology) [I]

**09:50-10:05** “*Morphology is All You Need: The Transformative Power of Galaxy Morphology in Predicting Galaxy Properties*”

Juan Pablo Alfonzo (Tohoku University)

**10:05-10:20** “*Disk formation and evolution by the SUPER instruments*”

Takafumi Tsukui (Kavli IPMU)

**10:20-10:35** “*Uncovering the Multi-Zone ISM in a Spatially Resolved Star-Forming Galaxy at  $z = 8.3$  with JWST and ALMA*”

Kana Takechi (University of Tokyo)

**10:35-10:50** “*PEGASUS: Pfs Emission-line GALaxy SURvey with Subaru*”

Mariko Kubo (Kwansei Gakuin University)

10:50-11:20 Coffee Break

**11:20-11:35** “*Statistical Analysis of ISM Electron Density at  $z \sim 0-11$  for Galaxy Evolution*”

Akimi Matsuura (University of Tokyo)

**11:35-11:50** “*BEACON: JWST NIRCcam Pure-parallel Imaging Survey. IV. A Systematic Search for Galaxy Overdensities and Evidence for Transition of Gas Accretion Phase*”

Ryo Albert Sutanto (Tohoku University)

**11:50-12:05** “*Probing New Physics at Cosmic Dawn: Constraints on the Fine-Structure Constant up to  $z \sim 10$  with JWST/NIRSpec [OIII] Emission Lines*”

Chishin Kamijo (University of Tokyo)



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**12:05-12:20** “Spider-Webb: Spatially-Resolved Evidence of Inside-Out Quenching in the Spiderweb Protocluster at  $z \sim 2$ ”

Ronaldo Laishram (NAOJ)

**12:20-12:35** “*Quenching and transformation of galaxies in the Spiderweb protocluster: Insights from HST grism and JWST observations*”

Abdurrahman Naufal (ASIAA)

12:35-14:00 Lunch Break

**14:00-14:20** “*Simulation-Based Inference for Cluster Weak Lensing and Cosmology*”

Sut-leng Tam (National Yang Ming Chiao Tung University) [I]

**14:20-14:35** “*HSC Niji - MB filter production and the first light -*”

Atsushi Nishizawa (Gifu Shotoku)

**14:35-14:50** “*Cosmology with HSC medium-bands filters*”

Hironao Miyatake (Nagoya University)

**14:50-15:05** “*The Mysterious Case of Iron in XMPs: Tracing Chemical Enrichment in the Local Analogues of the Early Universe*”

Aaron Myszka (Swinburne University of Technology)

**15:05-15:20** “*Low-mass with high-sSFR H $\alpha$  emitters at  $z \sim 2$  in ZFOURGE-COSMOS field*”

Jeung Yun (University of Tokyo)

**15:20-15:35** “*Non-LRD Broad Line AGN Confirmed at  $z \sim 9$* ”

Yui Takeda (SOKENDAI/NAOJ)

**15:35-15:50** “*Age gradients of Post-starburst galaxies at  $1 < z < 1.5$  revealed by JWST*”

Rajashree Bhuyan (National Taiwan University)

15:50-16:20 Coffee Break



[Special Session on Leadership & Career Path]

**16:20-16:45** Leadership Special Talk (1) by Jason Rhodes (NASA JPL)

**16:45-17:10** Leadership Special Talk (2) by Michitoshi Yoshida (NAOJ)

**17:10-17:30** Discussion



#### **March 19 (Day4)**

09:30-09:50 “A spatially resolved view of the baryon cycle in galaxies at cosmic noon”  
Rodrigo Herrera-Camus (Universidad de Concepción) [I]

09:50-10:05 “*LyA* galaxies at  $z \sim 7$ ”  
Felipe Barrientos (Pontificia Universidad Católica de Chile)

10:05-10:25 “Fire and Ice: Protoclusters and the Formation of the Most Massive Galaxies at Cosmic Dawn”  
Lucas Kimmig (University Observatory Munich, LMU) [I]

10:25-10:40 “*Planning study for Korean New Optical Telescope*”  
Se-jin Oh (KASI)

10:40-10:55 “High-Resolution Spectroscopic Studies of YSO Outbursts Selected from Large-Area Surveys”  
Ho-Gyu Lee (KASI)

10:55-11:25 Coffee Break

11:25-11:55 Discussion toward SUPER-IRNET-2.0

11:55-12:00 Concluding Remarks