

**EMN MEETING
CCGW & CCSD**

**Tuesday, May 23
Amethyst Room**

9:00-9:10AM

Opening

Session: Gravitational Wave I Session Chair: Gregory Comer

9:10-9:35AM

A01: Physical metric, gravitational waves and dark energy

Yukio Tomozawa
University of Michigan, USA

9:35-10:00AM

A02: J-GEM: Optical and Near-Infrared Follow-Up Observations for GW Sources

Tomoki Morokuma
University of Tokyo, Japan

10:00-10:25AM

A03: Perspectives on Spherical Gravitational Wave Detectors

Carlos Frajuca
Sao Paulo Federal Institute of Education, Science and Technology, Brazil

10:25-10:40AM

Session Break

Session: Spin Dynamics I Session Chair: Hongwu Liu

10:40-11:05AM

A04: Various magnetic behaviors at the interface between heavy metals and ferromagnets

June Seo Kim
Daegu-Gyeongbuk Institute of Science and Technology (DGIST), Korea

11:05-11:30AM

A05: Spin-charge conversion on 2D topological materials

Yuki Shiomi
Tohoku University, Japan

11:30-11:55AM

A06: Dynamics of fractional excitations in quantum spin liquids

Masafumi Udagawa
Gakushuin University, Japan

11:55AM-14:30PM

Lunch Break

Session: Gravitational Wave II Session Chair: Yukio Tomozawa

14:30-14:55PM

A07: What can quasinormal modes tell us about the microscopic structure of spacetime?

Ramin G. Daghigh
Metropolitan State University, USA

14:55-15:20PM

A08: The Connection between Gravitational Waves and Quantum Field Theory

John Macken
Macken Instruments Inc., USA

15:20-15:45PM	A09: Instability of hairy black holes in shift-symmetric Horndeski theories	Hiromu Ogawa Rikkyo University, Japan
15:45-16:00PM	Session Break	
Session: Spin Dynamics II Session Chair: Tomohiro Koyama		
16:00-16:25PM	A10: Spin current as a probe to detect spin dynamics	Yasuhiro Niimi Osaka University, Japan
16:25-16:50PM	A11: Spin-vibration interaction in a nanomechanical spin-valve	Gianluca Rastelli University of Konstanz, German
16:50-17:15PM	A12: Spin-charge conversion at surface state with spin splitting	Kouta Kondou RIKEN, Japan

**EMN MEETING
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**Wednesday, May 24
Amethyst Room**

Session: Spin Dynamics III Session Chair: Yasuhiro Niimi

9:00-9:25AM	A13: Dynamics nuclear polarization established by chiral edge modes	Hongwu Liu Jilin University, China
9:25-9:50AM	A14: Manipulation of magnetic domain and domain wall using electrical current	Tomohiro Koyama University of Tokyo, Japan
9:50-10:05AM	Session Break	

Session: Surface and Interface I Session Chair: Guoxin Xie

10:05-10:30AM	A15: Control of charge transport across interfaces for low-power bistable electrochemical devices	Eunyoung Kim Yonsei University, Korea
10:30-10:55AM	A16: Wetting Behavior of Water and Oil on the Solid Surfaces with Micropillars and Hybrid-Nanocoating	Young-Rae Cho Pusan National University, Korea
10:55-11:20AM	A17: Cross-sectional scanning tunneling microscopy and -spectroscopy of antiphase boundaries in GaP layers grown on Si(001)	Andrea Lenz Institute of Solid State Physics, Germany
11:20-11:45AM	A18: Fabrication and application of Si nanocrystals and nanopowder for energy devices	Hikaru Kobayashi Osaka University, Japan
11:45AM-14:00PM	Lunch Break	

Session: Gravitational Wave III Session Chair: Ramin G. Daghigh

14:00-14:25PM	A19: An Action Principle for Dissipative General Relativistic Multi-fluids and Plasmas	Gregory Comer Saint Louis University, USA
14:25-14:50PM	A20: Exploring fundamental physics with gravitational waves	Archil Kobakhidze The University of Sydney, Australia
14:50-15:15PM	A21: Binary black hole remnants of First stars for the gravitational wave source	Tomoya Kinugawa Kyoto University, Japan

15:15-15:40PM	A22: A fundamental plane for GRB afterglows	Maria Dainotti Jagelonian University, Poland
15:40-15:55PM	Session Break	
Session: Surface and Interface II Session Chair: Eunkyong Kim		
15:55-16:20PM	A23: An ab initio approach to surface photochemistry	Thorsten Kluener Carl von Ossietzky Universität Oldenburg, Germany
16:20-16:45PM	A24: Removal and recovery of gold(III) by biosorption and biomineralization using <i>Pseudomonas</i> sp.	Takehiko Tsuruta Hachinohe Institute of Technology, Japan
16:45-17:10PM	A25: Phonon dynamics of atomically thin MoS ₂ layers	Hyunmin Kim DGIST, Korea
17:10-17:35PM	A26: Stabilization of Water-in-Supercritical Carbon Dioxide Nanoclusters by Headgroup-Free Compounds	Masanobu Sagisaka Hirosaki University, Japan

**EMN MEETING
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**Thursday, May 25
Amethyst Room**

Session: Surface and Interface III Session Chair: Thorsten Kluener

9:00-9:25AM	A27: Breaking through the Tri-Gate channels width limited of normally-off GaN HEMT by modulation channel via-hole-length	Ray-Ming Lin Chang Gung University, Taiwan
9:25-9:50AM	A28: Supramolecular surface photochemistry of molecular self-assembly on 2D nanosurfaces	Yohei Ishida Hokkaido University, Japan
9:50-10:15AM	A29: Tunable Lubricity of Graphite Intercalation Compounds	Guoxin Xie Tsinghua University, China
10:15-10:30AM	Session Break	
Session: Gravitational Wave IV Session Chair: Archil Kobakhidze		
10:30-10:55AM	A30: Towards understanding of the LIGO GW events and they peculiarities	Hao Liu Niels Bohr Institute, Denmark/ Institute of High Energy Physics, CAS, China
10:55-11:20AM	A31: The merger of GW150914 in gas-rich environment	Hiromichi Tagawa National Astronomical Observatory of Japan, Japan
11:20-11:45AM	A32: The Necessary Existence of Gravitational Waves and the Repulsive Gravitation	C. Y. Lo Applied and Pure Research Institute, USA
11:45AM-12:10PM	A33: Macronovae: Electromagnetic Counterparts to Neutron Star Mergers	Oleg Korobkin Los Alamos National Laboratory, USA