

EAMA 10

The 10th East Asian Meeting on Astronomy

2016 September 26-30, Seoul National University, Seoul, KOREA

The 10th EAMA Program Book

**Venue : Hoam Faculty House / Samsung Convention Center
Seoul National University, Seoul, Korea**

*Registration opens at 5 pm on 9/26, and 8:30am every day
during the meeting period.*

Science Organizing Committee

Bon-Chul Koo (Chair, SNU)
Jongsoo Kim (KASI)
Kenta Fujisawa (Yamaguchi University)
Kaz Sekiguchi (NAOJ)
Shih-Ping Lai (National Tsing Hua University)
Wei-Hao Wang (ASIAA)
Di Li (NAO)
Yu Gao (PMO)

Local Organizing Committee

Myungshin Im (Chair, SNU)
Seo Gu Lee (KASI)
Kyoung-Suk Lee (KASI)
Sascha Trippe (SNU)
Sung-Chul Yoon (SNU)
Seong-Kook Lee (SNU)
Hyunju Noh (SNU)
Minhee Hyun (SNU)
Sophia Kim (SNU)

1. Invited / Oral talk Program

CONFERENCE PROGRAM

Monday, September 26

17:00 – 18:00 Registration

18:00 – 20:00 WELCOME RECEPTION @ Hoam Faculty House

Tuesday, September 27

08:30 – Registration

Opening – Mugunghwa Hall

Chair: Myungshin Im (SNU/Korea)

09:00 – 09:05 Opening

Bon-Chul Koo (SNU/Korea)

09:09 – 09:10 Welcome

Seong Keun Kim (College of Natural Sciences Dean, SNU/Korea)

09:10 – 09:20 Welcome

Myung Gyoon Lee (KAS President, SNU/Korea)

Part 1. Regional Activities

*(I) : Invited Talk

Chair: Seung Soo Hong (SNU/Korea)

09:20 – 09:40 25 Years of EAMA: from Cooperation to Coordination (I)

Norio Kaifu¹, Cai-pin Liu², Se-Hyung Cho³
(NAOJ/Japan¹, PMO/China², KASI/Korea³)

09:40 – 10:00 Report on EAO (I)

Paul Ho (ASIAA, EAO/Taiwan)

10:00 – 10:20 Current status and future planning of KASI (I)

Inwoo Han (KASI/Korea)

10:20 – 10:40 The Latest NAOJ Activities (I)

Masahiko Hayashi (NAOJ/Japan)

10:40 – 11:10 Coffee Break & Poster

Chair: Makoto Inoue (ASIAA/Taiwan)

11:10 – 11:30 Astronomy in ASIAA and Universities in Taiwan (I)

You-Hua Chu (ASIAA/Taiwan)

11:30 – 11:50 Recent Activities at Purple Mountain Observatory (I)

Ji Yang (PMO/China)

11:50 – 12:10 Recent Astronomical Development of NARIT and the Regional Collaboration (I)

Boonrucksar Soonthornthum (NARIT/Thailand)

12:10 – 12:30 The Development of Astrophysics in Vietnam: Challenges, Opportunities and International Collaboration (I)

Ngoc Phan-Bao (HCMIU/Vietnam)

12:30 -14:00 Lunch

Part 2. Current and Future Facilities

Chair: Yu Gao (PMO/China)

14:00 – 14:20 ALMA - science today and tomorrow (I)

Tetsuo Hasegawa (NAOJ/Japan)

14:20 – 14:40 KaVA : KVN and VERA Array (I)

Do-Young Byun (KASI/Korea)

14:40 – 15:00 The East-Asian VLBI Network (I)

Zhi-Qiang Shen (SHAO/China)

15:00 – 15:15 Nobeyama Radio Observatory

Masao Saito (NRO/Japan)

15:15 – 15:30 Upgraded TRAO and its performance

Chang Won Lee (KASI/Korea)

15:30 – 15:40 One Minute Talk

15:40 – 16:10 Coffee Break & Poster

Chair: Ciska Kemper (ASIAA/Taiwan)

16:10 – 16:30 Current Status of the JCMT (I)

Jessica Dempsey (EAO, JCMT/USA)

16:30 – 16:45 Greenland Telescope (GLT)

Satoki Matsushita (ASIAA/Taiwan)

16:45 – 17:05 Radio Spectroscopy with Tianma 65m and also FAST (I)

Junzhi Wang (SHAO/China)

17:05 – 17:25 A general purpose 6.5 meter optical telescope in China (I)

Xuebing Wu (PKU/China)

17:25 – 17:45 Transneptunian Automated Occultation Survey (TAOS II) (I)

Shiang-Yu Wang (ASIAA/Taiwan)

17:45 – 18:00 IGRINS : The Immersion Grating Infrared Spectrometer

Jae-Joon Lee (KASI/Korea)

Wednesday, September 28

Part 2. Current and Future Facilities (Continued) - Mugunghwa Hall

Chair: Narae Hwang (KASI/Korea)

09:00 – 09:20 Subaru Strategy for 2020's (I)

Nobuo Arimoto (NAOJ/Japan)

09:20 – 09:40 Current Status of the Giant Magellan Telescope (I)

Byeong-Gon Park (KASI/Korea)

09:40 – 10:00 Thirty Meter Telescope (TMT) Project Status (I)

Tomonori Usuda (NAOJ/Japan)

10:00 – 10:15 Update and status of CFHT

Daniel Devost (CFHT/USA)

10:15 – 10:30 Coffee Break

10:30 – 10:50 Large Area Imaging Spectroscopic Survey of Near-Infrared Sky in Space (I)

Woong-Seob Jeong (KASI/Korea)

10:50 – 11:10 Status of KAGRA (I)

Hyung Won Lee (Inje Univ./Korea)

Part 3. East Asian Future Planning for Astronomy

Chair: Masahiko Hayashi (NAOJ/Japan)

11:10 – 11:25 EAMA, EACOA, EAO, and further

Makoto Inoue (ASIAA/Taiwan)

11:25 – 11:40 Perspectives on the Future of Hawaii Astronomy

Doug Simons (CFHT/USA)

11:40 – 13:00 Panel Discussion

EACOA directors

13:00 – 14:00 Lunch

14:15 – EXCURSION and BANQUET

Thursday, September 29

Part 4. Sciences

Parallel Session I (Mugunghwa Hall)

Session 4-1 Galaxy Evolution and Cosmology

Chair: Nobuo Arimoto (NAOJ/Japan)

09:00 – 09:25 Preferred axis in cosmology (I)

Wen Zhao (USTC/China)

09:25 – 09:50 Cosmological Constraints from Galaxy Clustering Anisotropy (I)

Changbom Park (KIAS/Korea)

09:50 – 10:05 A New Large CMB non-Gaussianity aligned with Cosmic Structure

Luis Campusano (University of Chile/Chile)

10:05 – 10:20 Cosmic Microwave Background Temperature Anisotropy from the
Kinetic Sunyaev-Zel'dovich Effect

Hyunbae Park (KASI/Korea)

10:20 – 10:50 Coffee Break & Poster

Chair: Xuebing Wu (PKU/China)

10:50 – 11:15 Ensemble Mass Distribution of Galaxy Clusters from the CLASH Survey (I)

Keiichi Umetsu (ASIAA/Taiwan)

11:15 – 11:30 Discovery of a Faint Quasar at $z \sim 6$: Implications on Cosmic Reionization in the Early Universe

Yongjung Kim (SNU/Korea)

11:30 – 11:45 Improving Type Ia supernova cosmology

Eric Hsiao (Florida State Univ./USA)

11:45 – 12:00 H0LiCOW: H_0 Lenses in COSMOGRAIL's Wellspring -- Analysis of the Time-Delay Lensed Quasar HE 0435-1223

Kenneth Wong (NAOJ/Japan)

12:00 – 12:15 Model-independent reconstruction of the expansion history and non-local measurement of H_0

Benjamin L'Huillier (KASI/Korea)

12:15 – 12:30 HectoMAP and Horizon Run 4: A Cosmological Test with Large-scale Structures at Intermediate Redshifts

Ho Seong Hwang (KIAS/Korea)

12:30 – 14:00 Lunch

Chair: Hong Bae Ann (PNU/Korea)

14:00 – 14:25 Studies of QSO host galaxies (I)

Yiping Wang (NAOC/China)

14:25 – 14:40 Low redshift Lyman-alpha blobs

Mischa Schirmer (Gemini Observatory/Chile)

14:40 – 14:55 Cancel

Cancel

14:55 – 15:20 Multiple stellar populations in the halo and bulge of the Milky Way (I)

Young-Wook Lee (Yonsei Univ./Korea)

15:20 – 15:40 One Minute Talk

15:40 – 16:10 Coffee Break & Poster

Chair: Kohno Kotaro (University of Tokyo/Japan)

16:10 – 16:35 Star formation laws in galaxies near and far (I)

Yu Gao (PMO/China)

16:35 – 16:50 Infrared Medium-Deep Survey

Myungshin Im (SNU/Korea)

16:50 – 17:05 Star-formation Properties and Large Scale Structures of High-redshift Galaxies

Seong-Kook Lee (SNU/Korea)

17:05 – 17:20 The Impact of Star-Formation Recipes on numerical Simulations of Dwarf Galaxy Evolution

Gerhard Hensler (University of Vienna/Austria)

17:20 – 17:35 Morphology and Environment of Dwarf Galaxies

Hong Bae Ann (PNU/Korea)

17:35 – 17:50 The Virial Relation and Intrinsic Shape of Early-Type Galaxies

Sascha Trippe (SNU/Korea)

Thursday, September 29

Part 4. Sciences

Parallel Session II (Water Lily Hall)

Session 4-2 Star Formation and Exoplanets

Session 4-3 Astrophysics of Sun and Stars

Session 4-4 Diffuse Interstellar Medium

Chair: Chang Won Lee (KASI/Korea)

09:00 – 09:25 Disk Formation in the Early Phase of Star Formation (I)

Chin-Fei Lee (ASIAA/Taiwan)

09:25 – 09:50 Transitional disks: structure, origin and evolution (I)

Ewine van Dishoeck (Leiden Observatory/Netherlands)

09:50 – 10:05 ALMA Observations of Spiral Accretion Flows towards Class 0 source VLA1623A with a Keplerian disk

Shih-Ping Lai (NTHU/Taiwan)

10:05 – 10:20 Inner warm disk of Class I ESO H α 279a revealed by NaI and CO overtone emission lines

A-Ran Lyo (KASI/Korea)

10:20 – 10:50 Coffee Break & Poster

Chair: Ji Yang (PMO/China)

10:50 – 11:15 SEEDS direct imaging survey of exoplanet and disks, and next steps (I)

Nobuhiko Kusakabe, Motohide Tamura
(NAOJ, University of Tokyo/Japan)

11:15 – 11:30 The "TOP-SCOPE": Follow-up observations of Planck cold clumps with ground-based telescopes

Tie Liu (KASI/Korea)

11:30 – 11:45 Evidence for dynamically important magnetic fields on massive star-formation in RCW57A

Eswaraiah Chakali (NTHU/Taiwan)

11:45 – 12:00 BISTRO: B-fields In STar-forming Region Observations

Woojin Kwon (KASI/Korea)

12:00 – 12:15 Magnetic field structure and investigation of radiation driven implosion in BRCs

Archana Soam (KASI/Korea)

12:15 – 12:30 Disruption of Molecular Clouds by Expansion of HII Regions

Jeong-Gyu Kim (SNU/Korea)

12:30 – 14:00 Lunch

Chair: Zhi-Qiang Shen (SHAO/China)

14:00 – 14:25 Studies of the Sun with Hinode and Numerical Simulations (I)

Takaaki Yokoyama (University of Tokyo/Japan)

14:25 – 14:50 Three-minute Chromospheric Oscillations in Sunspots (I)

Jongchul Chae (SNU/Korea)

14:50 – 15:05 Space reconstruction of the morphology and kinematics of axisymmetric radio sources

Diep Pham Ngoc (VNASC/Vietnam)

15:05 – 15:20 Probing the Accretion Induced Collapse of White Dwarfs in Binary Millisecond Pulsars

Ali Taani (BAU/Jordan)

15:20 – 15:40 One Minute Talk

15:40 – 15:50 Group Photo

15:40 – 16:10 Coffee Break & Poster

Chair: Shih-Ping Lai (NTHU/Taiwan)

16:10 – 16:35 Solar signatures in ice cores (I)

Yuko Motizuki (RIKEN, Saitama Univ./Japan)

16:35 – 16:50 Molecules in S-type AGB stars

Xiaohu Li (ASIAA, NAOC/Taiwan)

16:50 – 17:05 Circumstellar Spirals/Shells/Arcs: the Messages from Evolved Stars

Hyosun Kim (ASIAA/Taiwan)

17:05 – 17:20 Crystalline silicates in external galaxies

Ciska Kemper (ASIAA/Taiwan)

17:20 - 17:35 Diffuse Interstellar Bands from SDSS DR7 normal galaxies

Bo Zhang (NAOC/China)

Friday, September 30

Part 4. Sciences (Continued):

Parallel Session I (Mugunghwa Hall)

Session 4-1 Galaxy Evolution and Cosmology

Chair: Kenta Fujisawa (Yamaguchi Univ. /Japan)

09:00 – 09:15 Recent Results of KaVA AGN Science WG

Bong Won Sohn (KASI/Korea)

09:15 – 09:30 Structural Transition in the NGC 6251 Jet: An interplay with
the Supermassive Black Hole and Its Host Galaxy

Chih-Yin Tseng (ASIAA/Taiwan)

09:30 – 09:45 Radio Activity of BL Lacertae During Gamma-ray Outbursts

Daewon Kim (SNU/Korea)

09:45 – 10:00 Multi-frequency AGN Survey with the KVN (MASK)

Taehyun Jung (KASI/Korea)

10:00 – 10:30 Coffee Break

Friday, September 30

Part 4. Sciences (Continued):

Parallel Session II (Water Lily Hall)

Session 4-3 Astrophysics of Sun and Stars

Session 4-4 Diffuse Interstellar Medium

Chair: Jongsoo Kim (SNU/Korea)

09:00 – 09:15 Influence of magnetic fields on molecular cloud evolution and turbulence

Frank Otto (The Chinese University of Hong Kong /Hong Kong)

09:15 – 09:30 Three-dimensional Shock Structure of Orion KL Outflow with IGRINS

Heeyoung Oh (KASI, SNU/Korea)

09:30 – 09:45 Molecular bubbles unveiling the progenitors of supernova remnants

Ping Zhou (Nanjing Univ./China)

09:45 – 10:00 A Supernova Remnant Candidate in the UWIFE Survey

Yesol Kim (SNU/Korea)

10:00 – 10:30 Coffee Break

Special Session: Women in Astronomy

Chair: Hyesung Kang (PNU/Korea)

10:30 – 10:35 Welcome

10:35 – 11:00 Roles of Women Astronomers in IAU

Ewine van Dishoeck (Leiden Observatory/Netherlands)

11:00 - 11:20 Women Astronomers in Taiwan

You-Ha Chu (ASIAA/Taiwan)

11:20 - 11:40 Women Astronomers in Japan

Yuko Motizuki (RIKEN, Saitama Univ./Japan)

11:40 – 12:00 Women Astronomers in China

Yiping Wang (NAOC/China)

12:00 – 12:10 Women Astronomers in Korea

Hyesung Kang (PNU/Korea)

12:10 – 12:20 Women Astronomers in Mongolia

Tsolmon Renchin (NUM/Mongolia)

12:20 – 12:25 Korea Young Astronomers' Meeting

Joowon Lee (KHU/Korea)

12:25 – 13:15 Women in Astronomy Lunch (sponsored by KWSE)

12:30 – 14:00 Lunch

Part 5. Historical Astronomy, Astronomy Education, and Public Outreach

Chair: Yiping Wang (NAOC/China)

14:00 – 14:15 An analysis of the syllabi of astronomy in Japanese universities

Shigeyuki Karino (KSU/Japan)

14:15 – 14:30 Transformable Reflecting Telescope Kit for Astronomical Education

Soojong Pak (KHU/Korea)

14:30 – 14:45 Bioastronomy teaching at the U. of Chile (1979-2015)

Luis Campusano (University of Chile/Chile)

14:45 – 15:00 Public outreach activities using Mobile Planetarium

Tsolmon Renchin (NUM/Mongolia)

Summary and Closing

Chair: Bon-Chul Koo (SNU/Korea)

15:00 – 15:20 Meeting Summary

Paul Ho (ASIAA, EAO/Taiwan)

15:20 Closing

2. Poster Program

CONFERENCE POSTERS

**** Presenting on behalf of authors**

[Poster - Part 1. Regional Activities]

P1.1 Astronomy in Hong Kong

Frank Otto (CUHK /Hong Kong)

[Poster - Part 2. Current and Future Facilities]

P2.1 The scientific impact of the new ALMA Band 1 receiver

Ciska Kemper (ASIAA/Taiwan)

P2.2 The East-Asian VLBI Network

Kiyoaki Wajima (KASI/Korea)

P2.3 The Japanese VLBI Network

Kenta Fujisawa (Yamaguchi Univ./Japan)

P2.4 From SMA to w-SMA

Naomi Hirano (ASIAA/Taiwan)

P2.5 K-GMT Science Program: Stepping Stone to Korean GMT Observatory in 2020's

Narae Hwang (KASI/Korea)

P2.6 Carbon Fiber Mirror

Young-Soo Kim (KASI/Korea)

P2.7 DOTIFS: a new optical multi-Integral Field Unit spectrograph for the 3.6m Devasthal optical telescope

Haeun Chung (SNU/Korea)

P2.8 The University of Tokyo Atacama Observatory (TAO) Project: Current Status

Kohno Kotaro (University of Tokyo/Japan)

P2.9 TWINKLE – A Low Earth Orbit Visible and Infrared Exoplanet Spectroscopy Observatory

Marcell Tessenyi^{1,2}, Giorgio Savini^{1,2}, Giovanna Tinetti^{1,2},
Jonathan Tennyson^{1,2}, Mekhi Dhesi², ** Max Joshua²
(Physics and Astronomy, UCL/U.K.¹, Blue Skies Space Ltd./U.K.²)

[Poster - Part 3. East Asian Planning for Astronomy]

[Poster - Part 4. Sciences--- 1. Galaxy Evolution and Cosmology]

P4.1 High redshift galaxy clusters and superclusters

Minhee Hyun (SNU/Korea)

P4.2 Photometric Reverberation Mapping with Medium Bands Installed on SQUEAN

Yoon Chan Taak (SNU/Korea)

P4.3 Infrared Variability and Time Lags for Periodic Quasars

Hyunsung Jun (JPL, Caltech/USA)

P4.4 Properties of Spectrally-defined Red QSOs at $z = 0.3-1.2$

Anli Tsai (NCU/Taiwan)

- P4.5 Star Forming Elliptical Galaxies
Chorng-Yuan Hwang (Graduate Institute of Astronomy, NCU/Taiwan)
- P4.6 What makes red quasars red?: Intrinsically red vs. dusty red
Dohyeong Kim (SNU/Korea)
- P4.7 Tidal disruption event, Swift J1644+57: host galaxy properties and black hole mass
Yongmin Yoon (SNU/Korea)
- P4.8 Exploring the transverse structure of M87 jet with KaVA Large Program
Hyunwook Ro (Yonsei Univ., KASI/Korea)
- P4.9 4C+21.35 Kinematics with KaVA observation
Taeseok Lee (SNU/Korea)
- P4.10 PAGaN II: The Evolution of AGN jets on Sub-Parsec Scales
Junghwan Oh (SNU/Korea)
- P4.11 STUDIES: SCUBA-2 Ultra Deep Imaging EAO Survey
Wei-Hao Wang (ASIAA/Taiwan)
- P4.12 Near-Infrared Spectroscopy of early afterglow of Ultra-Long GRB 111209A
Sang-Yun Lee (SNU/Korea)
- P4.20 Constraining the shielded wind scenario in PG 2112+059
Cristian Saez (KASI/Korea)

[Poster - Part 4. Sciences--- 2. Star Formation and Exoplanets]

- P4.13 The relationship between the young star clusters and the molecular clouds
Hongjun Ma (PMO/China)
- P4.14 HIFI SPECTROSCOPY OF H₂O SUBMM LINES IN NUCLEI OF ACTIVELY STAR FORMING GALAXIES
Lijie Liu (PMO/China)
- P4.15 The signs of planets in resolved near-infrared image of protoplanetary disks: LkCa 15 and GM Aur
Daehyeon Oh (NMSC, NAOJ/Japan)
- P4.16 Atmospheric Compositions of the Galilean moons Io and Callisto
Ming-Chi Chung (Dept. of Earth Sciences, NTNU/Taiwan)

[Poster - Part 4. Sciences--- 4. Diffuse Interstellar Medium]

- P4.18 Supernova Remnants in the UWIFE and UWISH2 Surveys
Yong-Hyun Lee (SNU/Korea)
- P4.19 Near-infrared MOS observations of RCW 103
Ho-Gyu Lee (KASI/Korea)

[Poster – Special Session: Women in Astronomy]

PS.1 Women in Astronomy for Mongolia

Tsolmon Renchin, **Gerelmaa Dulamdorj, Altangerel Balgan (NUM/Mongolia)