

REPORT ON THE RADIOPNET3 NETWORKING ACTIVITY

TITLE: REVOLUTIONS IN ASTRONOMY WITH ALMA: THE THIRD YEAR

DATE: 8-11 DEC 2014

TIME: (WHOLE DAY)

LOCATION: TOKYO, JAPAN

MEETING WEBPAGE <http://www.almasc2014.jp/>

HOST INSTITUTE: NATIONAL ASTRONOMICAL OBSERVATORY OF JAPAN

PARTICIPANTS NO: 291

MAIN LEADER: INAF

REPORT:

1. Programme of the meeting

See attachment and http://www.almasc2014.jp/final_program.pdf.

In addition to the talks, a large number of poster presentations were displayed at the workshop (http://www.almasc2014.jp/final_poster). Three public talks were also part of the conference, see <http://www.almasc2014.jp/public.html#contents-top>.

2. Scientific Summary

The Atacama Large Millimeter/submillimeter Array (ALMA) has been producing a growing number of impressive and scientifically compelling results as the most powerful mm/submm interferometer in the world. Held in central Tokyo, this four day conference highlighted the most recent science results from ALMA obtained during the first three years of science operations, and was a forum to motivate future collaboration among researchers around the world. The science topics included all fields of astronomy: cosmology and galaxies in the distant universe, nearby galaxies and the Galactic Center, ISM and star formation in our own galaxy, astrochemistry, circumstellar disks, exoplanets, solar system, stellar evolution and the Sun. Recent results using the ALMA Archive were also presented.

New transformational results were presented in all fields of ALMA Science. The meeting was attended by a large audience, which was composed of a healthy mix of new, young ALMA users as well as more experienced senior researchers. Presentations on the status of ALMA new modes, and in particular the new high frequency receivers and the long baselines results were also presented. A special poster session was devoted to technical topics.

A round table led by the ALMA Director Pierre Cox and composed of Anneila Sargent, Paul Ho, Eva Schinnerer, and Monica Rubio discussed the future ALMA priorities and development possibilities.

3. Attendance list (incl. participant names, affiliation and country) signed by the participants and confirmed by the organizer

The conference was attended by 291 researchers, the full list is attached to this report. The gender distribution was 204 males and 87 females (approximately 70/30 distribution). The group picture of the participants is appended below.



Figure 1. Participants group picture

4. Financial Report / RadioNet3 contribution

Radionet funding (2850, - EUR) was used to support the participation of European Invited Speakers (Susanne Aalto and Valentin Bujabarral) and Discussion Panel member (Eva Schinnerer).

5. Conference Proceedings and Web page

The conference proceedings will be published by ASP, contributions will be collected during the first quarter of 2015. The presentations will not be published online.

Revolution in Astronomy with ALMA - the 3rd year -

Invited: 25 + 5 minutes Q&A

Contributed: 12 + 3 minutes Q&A

December 8, 2014

Opening Session (chair: Ken Tatematsu)

10:00 - 10:05	Announcement from the LOC
10:05 - 10:15	Welcome Masa Hayashi, <i>National Astronomical Observatory of Japan</i>
10:15 - 10:45	(invited) Atacama Large Millimeter/submillimeter Array Pierre Cox, <i>Joint ALMA Observatory</i>

Cosmology and High Redshifts I (chair: Kentaro Motohara)

10:45 - 11:15	(invited) Deep ALMA Surveys Edo Ibar, <i>Universidad de Valparaiso</i>
11:15 - 11:30	Probing normal starbursts at high-z: ALMA observations of lensed SMGs Kirsten Knudsen, <i>Chalmers University of Technology</i>
11:30 - 11:45	An ALMA survey of sub millimeter galaxies in the Extended Chandra Deep Field South (ALESS): Near-infrared morphologies and stellar sizes from HST WFC3/IR imaging Chian-Chou Chen, <i>Durham University</i>
11:45 - 12:00	The ALMA millimeter continuum imaging survey for z > 4-5 candidate 1100 micron selected galaxies in the SXDF/UDS Soh Ikarashi, <i>European Southern Observatory</i>

Lunch

Circumstellar Disks, Exoplanets, Solar System I (chair: Nagayoshi Ohashi)

13:30 - 14:00	(invited) Disks in transition: from protoplanetary to debris William Dent, <i>ESO/Joint ALMA Observatory</i>
14:00 - 14:15	Chemical imaging of the CO snow line in disks Chunhua Qi, <i>Harvard-Smithsonian Center for Astrophysics</i>
14:15 - 14:30	Detection and characterization of protoplanetary disks across the stellar/substellar transition Gerrit van der Plas, <i>University of Chile</i>
14:30 - 14:45	Brown dwarf disks with ALMA Leonardo Testi, <i>European Southern Observatory</i>
14:45 - 15:00	ALMA observations of circumstellar disks in Upper Scorpius: a study of the late stages of protoplanetary disk evolution Scott Barenfeld, <i>California Institute of Technology</i>

Poster Session

Stellar Evolution and the Sun (chair: Al Wootten)

16:00 - 16:30	(invited) Results from ALMA observations of nebulae around evolved stars Valentin Bujarrabal, <i>Observatorio Astronomico Nacional</i>
16:30 - 16:45	ALMA observations of supernova 1987A Mikako Matsuura, <i>University College London</i>
16:45 - 17:00	The chemical composition of the dust formation zone of IRC+10216 Jose Cernicharo, <i>CSIC</i>
17:00 - 17:15	The molecular jets in the porto-planetary nebula HD101584 Hans Olofsson, <i>Chalmers University of Technology</i>
17:15 - 17:30	The coldest object in the universe: probing the mass distribution of the ultra-cold outflow and dusty disk in the Boomerang Nebula Raghvendra Sahai, <i>JPL/California Institute of Technology</i>
17:30 - 17:45	Shaping the outflows of binary AGB stars Sofia Ramstedt, <i>Uppsala University</i>

December 9, 2014

Frontiers of ALMA Capabilities (chair: Tomoharu Oka)

9:00 - 9:15	Overview of EOC activities and science verification Catherine Vlahakis, <i>Joint ALMA Observatory/ESO</i>
9:15 - 9:30	The ALMA Long Baseline Campaign Ed Fomalont, <i>Joint ALMA Observatory/NRAO</i>
9:30 - 9:45	The ALMA High Frequency Campaign Satoko Takahashi, <i>Joint ALMA Observatory/NAOJ</i>

Galaxies and Galactic Nuclei I (chair: Tomoharu Oka)

9:45 - 10:15	(invited) Quantifying key components in galaxies using ALMA: molecular clouds, dust, outflows, and supermassive black holes Kotaro Kohno, <i>University of Tokyo</i>
10:15 - 10:30	The ALMA view of the starburst in NGC 253 Alberto Bolatto, <i>University of Maryland</i>

Coffee Break

Galaxies and Galactic Nuclei I (chair: John Hibbard)

10:50 - 11:05	Radio jets clearing the way: watching feedback in action in the Seyfert galaxy IC 5063 Raffaella Morganti, <i>ASTRON, Kapteyn Institute</i>
11:05 - 11:20	How do you drive molecular outflows? ALMA's view of AGN feedback in NGC 1266 Timothy Davis, <i>University of Hertfordshire</i>

11:20 - 11:35	Ballistic molecular rain powers cold black hole feedback in a cool core brightest cluster galaxy Grant Tremblay, <i>Yale University</i>
11:35 - 11:50	The molecular gas outflow of NGC 1068 imaged by ALMA Santiago Garcia-Burillo, <i>OAN-IGN</i>
11:50 - 12:05	ALMA observations of a candidate molecular outflow in obscured quasar SDSS J1356+1026 Ai-Lei Sun, <i>Princeton University</i>

Lunch

ISM, Star Formation and Astrochemistry I (chair: Jesus Martin-Pintado)

13:30 - 14:00	(invited) Chemical fingerprints: ALMA's view of the early stages of star formation Karin Oberg, <i>Harvard University</i>
14:00 - 14:15	Exploring molecular complexity with ALMA: first results of the EMoCA survey Arnaud Belloche, <i>Max-Planck-Institut fur Radioastronomie</i>
14:15 - 14:30	Extremely dense core: evidence for a first hydrostatic core Ryohei Kawabe, <i>National Astronomical Observatory of Japan</i>
14:30 - 15:00	(invited) Protostellar disk formation traced by chemistry Nami Sakai, <i>University of Tokyo</i>
15:00 - 15:15	Chemical effects of protostellar accretion bursts imaged by ALMA Jes Jorgensen, <i>University of Copenhagen</i>
15:15 - 15:30	The HH212 protostar as observed by ALMA: the jet, the cavity, and the forming disk Claudio Codella, <i>INAF - Osservatorio Astrofisico di Arcetri</i>

Poster Session

Panel Discussion

16:30 - 17:30	Panelists: Pierre Cox (chair), Paul Ho, Monica Rubio, Anneila Sargent, Eva Schinnerer
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Conference Photo

Banquet (18:30 - 20:30; Hall B5)

December 10, 2014

Circumstellar Disks, Exoplanets, Solar System II (chair: John Carpenter)

9:00 - 9:30	(invited) Gas and dust in circumstellar disks: Review of recent results Meredith Hughes, <i>Wesleyan University</i>
9:30 - 9:45	Spiral arms in the transition disk of HD 142527 Valentin Christiaens, <i>University of Chile</i>
9:45 - 10:00	Dust depletion and large scale asymmetries in transitional disks Laura Perez, <i>National Radio Astronomy Observatory</i>
10:00 - 10:15	Planet formation in the GG Tau A multiple system? Anne Dutrey, <i>Laboratoire d'Astrophysique de Bordeaux</i>
10:15 - 10:30	Quantifying the gas inside dust cavities in transitional disks: implications for young planets Ewine van Dishoeck, <i>Leiden Observatory</i>

Coffee Break

Circumstellar Disks, Exoplanets, Solar System II (chair: Leonardo Testi)

10:50 - 11:05	Survey of molecular gas in debris disks John Carpenter, <i>California Institute of Technology</i>
11:05 - 11:20	ALMA view of the inner debris structure in the Fomalhaut planetary system Kate Su, <i>University of Arizona</i>
11:20 - 11:35	Highlighting the dynamical interaction between planets and planetesimal belts with ALMA Luca Ricci, <i>California Institute of Technology</i>
11:35 - 12:05	(invited) Exploring the solar system with ALMA: planets, moons and beyond Arielle Mouillet, <i>National Radio Astronomy Observatory</i>

Lunch

Galaxies and Galactic Nuclei II (chair: Alberto Bolatto)

13:30 - 14:00	(invited) Galaxies and galaxy nuclei with ALMA Susanne Aalto, <i>Chalmers University of Technology</i>
14:00 - 14:15	An ALMA spectral scan of the obscured luminous infrared galaxy NGC 4418 Francesco Costagliola, <i>Chalmers University of Technology</i>
14:15 - 14:30	Distribution of molecules in the circumnuclear disk and surrounding starburst ring in the Seyfert galaxy NGC 1068 observed with ALMA Shuro Takano, <i>National Astronomical Observatory of Japan</i>
14:30 - 14:45	Submillimeter observations of the dense gas in the type-1 active nucleus of NGC 1097 and NGC 7469 for a robust energy diagnostic Takuma Izumi, <i>University of Tokyo</i>

14:45 - 15:00	ALMA explorations of warm dense molecular gas in nearby LIRGs Kevin Xu, <i>California Institute of Technology/IPAC</i>
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15:00 - 15:15	Diffuse and dense gas in nearby luminous merging galaxies Toshiki Saito, <i>University of Tokyo</i>
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Poster Session

Galaxies and Galactic Nuclei II (chair: Satoru Iguchi)

16:15 - 16:35 (17+3)	The molecular environment star formation and cluster dissolution across dynamically distinct environments in NGC 1097 (allocated 5 minute extension to introduce a cancelled talk by K. Scott) Kartik Sheth, <i>National Radio Astronomy Observatory</i>
16:35 - 16:50	ALMA and VLA measurements of frequency-dependent time lags in Sagittarius A*: evidence for a relativistic outflow Christiaan Brinkerink, <i>IMAPP, Radboud University Nijmegen</i>
16:50 - 17:05	Ionized gas observations toward a nearby starburst galaxy NGC 253 Kouichiro Nakanishi, <i>National Astronomical Observatory of Japan</i>
17:05 - 17:20	Star formation and turbulence in the Antennae overlap region Cinthya Herrera, <i>National Astronomical Observatory of Japan</i>
17:20 - 17:35	Star formation in extreme environments: the case of the prototypical blue compact dwarf II Zw 40 Amanda Kepley, <i>National Radio Astronomy Observatory</i>
17:35 - 17:50	WISDOM: mm-wave interferometric survey of dark object masses Martin Bureau, <i>University of Oxford</i>
17:50 - 18:05	Investigating the evolution of merging galaxies via cold molecular gas Junko Ueda, <i>National Astronomical Observatory of Japan</i>

December 11, 2014

ISM, Star Formation and Astrochemistry II (chair: Jongsoo Kim)

9:00 - 9:15	Resolved filaments and star formation in N159 with ALMA cycle 1: most active on-going star formation in the Local Group Yasuo Fukui, <i>Nagoya University</i>
9:15 - 9:30	ALMA observations of the massive molecular outflow G331.512-0.103: physical properties, kinematics and geometry modeling Carlos Hervias, <i>Universidad de Chile</i>
9:30 - 9:45	The largest fragmenting and OB cluster forming disk-like structure Hauyu Baobab Liu, <i>Academia Sinica Institute of Astronomy and Astrophysics</i>
9:45 - 10:00	Collimated ionized wind and rotating disk-like system associated with G345.4938+01.4677 Andres Guzman, <i>Universidad de Chile</i>
10:00 - 10:15	Fragmentation of Molecular Clumps and Protocluster Formation Qizhou Zhang, <i>Harvard-Smithsonian Center for Astrophysics</i>

Coffee Break

ISM, Star Formation and Astrochemistry II (chair: Sheng-Yuan Liu)

10:35 - 10:50	A cluster in the making: ALMA reveals the initial conditions for high-mass cluster formation Jill Rathborne, CSIRO Astronomy and Space Science
10:50 - 11:05	Detection of a hot molecular disk around a massive protostar candidate Orion KL Source I Tomoya Hirota, National Astronomical Observatory of Japan
11:05 - 11:20	The fundamental structure of UV-irradiated cloud edges: ALMA observations of the Orion Bar PDR Javier Goicoechea, ICMM-CSIC
11:20 - 11:35	ALMA Observations of a high-density Core in Taurus: Dynamical gas interaction at the possible site of a multiple star formation Toshikazu Onishi, Osaka Prefecture University
11:35 - 11:50	A complete census of dense cores in Chamaeleon I: Results from an ALMA cycle 1 survey Michael Dunham, Harvard-Smithsonian Center for Astrophysics

Lunch

Cosmology and High Redshifts II (chair: Tetsuo Hasegawa)

13:30 - 14:00	(invited) ISM evolution at high z - supercharged starbursts Nick Scoville, California Institute of Technology
14:00 - 14:15	Resolving the extragalactic background light with the multifield deep ALMA data Seiji Fujimoto, University of Tokyo
14:15 - 14:45	(invited) The ISM at high redshift – first results from ALMA and a look to the future Linda Tacconi, Max-Planck-Institut fuer extraterrestrische Physik
14:45 - 15:00	ALMA high-resolution imaging of dusty starbursts and “typical” galaxies back to the first billion years of cosmic time Dominik Riechers, Cornell University

Coffee Break

Cosmology and High Redshifts II (chair: Paola Andreani)

15:20 - 15:35	Properties of molecular gas in star-forming galaxies at z~1.4 with ALMA Akifumi Seko, Kyoto University
15:35 - 15:50	ALMA and PKS1830-211: the molecular absorption and the background blazar Sebastien Muller, Onsala Space Observatory

15:50 - 16:05	Resolved ALMA detections of [CII] emission in galaxies at z = 4.8 Rebecca Williams, <i>University of Cambridge</i>
16:05 - 16:20	Optically thick [CII] emission in lensed dusty star-forming galaxies from the SPT survey Bitten Gullberg, <i>European Southern Observatory</i>
16:20 - 16:35	First detection of the CH+(J=1-0) line in a high redshift lensed galaxy Edith Falgarone, <i>ENS -Observatoire de Paris</i>
16:35 - 16:50	Two gamma-ray bursts from dusty regions with little molecular gas Bunyo Hatsukade, <i>National Astronomical Observatory of Japan</i>
16:50 - 17:05	ALMA reveals a warm and compact starburst around a heavily obscured supermassive black hole at z = 4.75 Roberto Gilli, <i>INAF - Osservatorio Astronomico di Bologna</i>

Closing Session (chair: Ken Tatematsu)

17:05 - 17:35	(invited) Conference summary Christine Wilson, <i>McMaster University</i>
17:35 - 17:45	Final remark Tetsuo Hasegawa, <i>National Astronomical Observatory of Japan</i>

Given	Family	Title	Country	Affiliation
1 Susanne	Aalto	Prof.	Sweden	Chalmers University of Technology
2 Zulema	Abraham	Prof.	Brazil	Astronomy Department, University of Sao Paulo, Brazil
3 Mark	Adams	Dr.	United States	National Radio Astronomy Observatory
4 Yuri	Aikawa	Dr.	Japan	Department of Earth and Planetary Sciences, Kobe University
5 Eiji	Akiyama	Dr.	Japan	NAOJ
6 Rebeca	Aladro	Dr.	Chile	ESO
7 Felipe	Alves	Dr.	Germany	Max-Planck-Institut fur extraterrestrische Physik
8 Sibylle	Anderl	Dr.	France	Institut de Planetologie et d'Astrophysique de Grenoble
9 Misaki	Ando	Ms.	Japan	The University of Tokyo
10 Ryo	Ando	Mr.	Japan	University of Tokyo
11 Paola	Andreani	Dr.	Germany	European Southern Observatory
12 Yiping	Ao	Dr.	Japan	NAOJ
13 Yusuke	Aso	Mr.	United States	The University of Tokyo (Subaru, NAOJ)
14 Junichi	Baba	Dr.	Japan	Earth-Life Science Institute, Tokyo Institute of Technology
15 Francesca	Bacciotti	Dr.	Italy	Istituto Nazionale di Astrofisica - Osservatorio Astrofisico di Arcetri
16 Scott	Barenfeld	Mr.	United States	California Institute of Technology
17 Pedro	Beirao	Dr.	France	Observatoire de Paris
18 Arnaud	Belloche	Dr.	Germany	Max-Planck-Institut fur Radioastronomie
19 Andrew	Blain	Prof.	United Kingdom	University of Leicester
20 Alberto	Boatto	Prof.	United States	University of Maryland
21 Nicolas	Bouche	Dr.	France	Institute of Research in Astrophysics and Planetology
22 Christiaan	Brinkerink	Mr.	Netherlands	Department of Astronomy, IMAPP, Radboud University Nijmegen
23 Drew	Brisbin	Dr.	United States	NRAO
24 Valentin	Bujarrabal	Dr.	Spain	Observatorio Astronomico Nacional
25 Martin	Bureau	Prof.	United Kingdom	University of Oxford
26 John	Carpenter	Dr.	United States	Caltech
27 Jose	Cernicharo	Prof.	Spain	CSIC
28 Ranga	Chary	Dr.	United States	IPAC/Caltech
29 Chian-Chou	Chen	Dr.	United Kingdom	Department of Physics, Durham University
30 Vivien Huei-Ru	Chen	Prof.	Taiwan	National Tsing Hua University
31 James	Chibueze	Dr.	Japan	NAOJ
32 Se-Hyung	Cho	Dr.	Republic of Korea	Astronomy and Space Science Institute
33 Hsuan	Chou	Ms.	Taiwan	Academia Sinica Institute of Astronomy and Astrophysics
34 Valentin	Christiaens	Mr.	Chile	University of Chile
35 Yo-Ling	Chuang	Ms.	Taiwan	National Taiwan Normal University
36 Claudio	Codella	Dr.	Italy	INAF - Osservatorio Astrofisico di Arcetri
37 Yanett	Contreras	Dr.	Australia	CSIRO Astronomy and Space Science
38 Stuart	Corder	Dr.	Chile	Joint ALMA Observatory
39 Martin	Cordiner	Dr.	United States	NASA Goddard Space Flight Center
40 Francesco	Costagliola	Dr.	Spain	Chalmers
41 Audrey	Coutens	Dr.	Denmark	Niels Bohr Institute, Centre for Star and Planet Formation, University of Copenhagen
42 Pierre	Cox	Dr.	Chile	ALMA/JAO
43 Timothy	Davis	Dr.	United Kingdom	University of Hertfordshire
44 Thijss	de Graauw	Prof.	Chile	ESO; LPN-ASC; USP-IGA
45 Tim	De Zeeuw	Prof.	Germany	ESO
46 William	Dent	Dr.	Chile	ALMA/ESO
47 Guillaume	Drouart	Dr.	Sweden	Onsala Space Observatory, Chalmers University
48 Michael	Dunham	Prof.	United States	Harvard-Smithsonian Center for Astrophysics
49 Anne	Dutrey	Dr.	France	Laboratoire d'Astrophysique de Bordeaux
50 Yuji	Ebisawa	Mr.	Japan	University of Tokyo
51 Fumi	Egusa	Dr.	Japan	ISAS/JAXA
52 Edith	Falgarone	Dr.	France	ENS - Observatoire de Paris
53 Gregory	Fleishman	Dr.	United States	New Jersey Institute of Technology
54 Edward	Fomalont	Dr.	Chile	NRAO/JAO
55 Valeria	Foncea	Chile	JAO	
56 Kosuke	Fujii	Mr.	Japan	The University of Tokyo
57 Seiji	Fujimoto	Mr.	Japan	Institute of Cosmic Ray Research
58 Misato	Fukagawa	Dr.	Japan	Osaka University
59 Yasuo	Fukui	Prof.	Japan	Nagoya University
60 Gary	Fuller	Dr.	United Kingdom	UK ARC Node, Jodrell Bank Centre for Astrophysics, University of Manchester
61 Jose	gallardo	Dr.	Chile	ALMA
62 Roberto	Galvan-Madrid	Prof.	Mexico	CRA-UNAM
63 Santiago	Garcia-Burillo	Dr.	Spain	OAN-IGN
64 Maryvonne	Gerin	Prof.	France	LERMA
65 Roberto	Gilli	Dr.	Italy	INAF - Osservatorio Astronomico di Bologna
66 Adam	Ginsburg	Dr.	Germany	ESO Garching
67 Josep	Girart	Dr.	Spain	Institut de Ciencies de l'Espai, (CSIC-IEEC)
68 Javier	Goicoechea	Dr.	Spain	ICMM-CSIC
69 Jose-Francisco	Gomez	Dr.	Spain	Instituto de Astrofisica de Andalucia, CSIC
70 Bitten	Gullberg	Ms.	Germany	European Southern Observatory
71 Andres	Guzman	Dr.	Chile	Departamento de Astronomia, Universidad de Chile
72 Viviana	Guzman	Dr.	United States	Harvard-Smithsonian Center for Astrophysics
73 Yoshiaki	Hagiwara	Dr.	Japan	NAOJ
74 Chiromi	Hara	Ms.	Japan	The University of Tokyo/NAOJ
75 Nanase	Harada	Dr.	Germany	MPFR/ASIAA

Given	Family	Title	Country	Affiliation
76 Ryoei	Harada	Mr.	Japan	Osaka Prefecture University
77 Tetsuo	Hasegawa	Prof.	Chile	NAOJ Chile Observatory
78 Yasuhiro	Hasegawa	Japan	NAOJ	
79 Jun	Hashimoto	Dr.	United States	The University of Oklahoma
80 Bunyo	Hatsukade	Dr.	Japan	NAOJ
81 Masa	Hayashi	Dr.	Japan	National Astronomical Observatory of Japan
82 Natsuki	Hayatsu	Ms.	Japan	The University of Tokyo Theoretical Astrophysics
83 Cinthya	Herrera	Ms.	Japan	NAOJ
84 Carlos	Hervas	Mr.	Chile	Universidad de Chile
85 John	Hibbard	Mr.	United States	National Radio Astronomy Observatory
86 Masaaki	Hiramatsu	Dr.	Japan	National Astronomical Observatory of Japan
87 Naomi	Hirano	Dr.	Taiwan	Academia Sinica, Institute of Astronomy & Astrophysics
88 Hiroyuki	Hirashita	Dr.	Taiwan	Academia Sinica, Institute of Astronomy and Astrophysics
89 Tomoya	Hirota	Dr.	Japan	National Astronomical Observatory of Japan
90 Paul	Ho	Prof.	Taiwan	Academia Sinica Institute of Astronomy and Astrophysics
91 Meredith	Hughes	Prof.	United States	Wesleyan University
92 Edo	Ibar	Prof.	Chile	Universidad de Valparaiso
93 Satoru	Iguchi	Prof.	Japan	NAOJ
94 Soh	Ikarashi	Dr.	Germany	ESO
95 Daisuke	Iono	Dr.	Japan	NAOJ
96 Masato	Ishiguro	Prof.	Japan	
97 Shun	Ishii	Dr.	Japan	Institute of Astronomy, The University of Tokyo
98 Rob	Ivison	Prof.	Germany	ESO
99 Takumi	Izumi	Mr.	Japan	The University of Tokyo
100 Philip	Jewell	Dr.	United States	National Radio Astronomy Observatory
101 Christine	Joblin	Dr.	France	IRAP, Universite Toulouse/CNRS
102 Katharine	Johnston	Dr.	United Kingdom	The University of Leeds
103 Jes	Jorgensen	Dr.	Denmark	Niels Bohr Institute & Centre for Star and Planet Formation, Univ. Copenhagen
104 Norio	Kaiju	Prof.	Japan	IAU
105 Kazuhisa	Kamegai	Dr.	Japan	Tokyo University of Science
106 Hiroyuki	Kaneko	Dr.	Japan	University of Tsukuba
107 JI-HYUN	KANG	Dr.	Republic of Korea	Astronomy and Space Science Institute
108 Akimasa	Kataoka	Dr.	Japan	Tokyo Institute of Technology
109 Yuta	Kato	Mr.	Japan	National Astronomical Observatory of Japan, Chile Observatory (The University of Tokyo)
110 Ryoei	Kawabe	Prof.	Japan	NAOJ
111 Akiko	Kawamura	Dr.	Japan	NAOJ
112 Amanda	Kepley	Dr.	United States	NRAO
113 Jongsoon	Kim	Dr.	Republic of Korea	Astronomy and Space Science Institute
114 Kee-Tae	Kim	Dr.	Republic of Korea	Astronomy and Space Science Institute
115 Kyoungh Hee	Kim	Dr.	Republic of Korea	Astronomy and Space Science Institute
116 Kirsten	Knudsen	Dr.	Sweden	Chalmers University of Technology
117 Koen	KOBAYASHI	Dr.	Japan	University of Toyama
118 Kotaro	Kohno	Prof.	Japan	Institute of Astronomy, University of Tokyo
119 Shinya	Komugi	Prof.	Japan	Kogakuin University
120 Shin	Koyamatsu	Mr.	United States	The University of Tokyo / NAOJ
121 Yi-Jehng	Kuan	Prof.	Taiwan	National Taiwan Normal University
122 Takuya	Kurahashi	Mr.		
123 Tadayoshi	Kusune	Mr.	Japan	Nagoya-city University
124 Shih-Ping	Lai	Prof.	Taiwan	National Tsing Hua University, Taiwan
125 Robert	Laing	Prof.	Germany	ESO
126 Chang Won	Lee	Dr.	Republic of Korea	Astronomy and Space Science Institute
127 Chin-Fei	Lee	Prof.	Taiwan	Institute of Astronomy and Astrophysics, Academia Sinica
128 Jung-Won	Lee	Dr.	Republic of Korea	Astronomy and Space Science Institute
129 Minju	Lee	Ms.	Japan	The University of Tokyo / NAOJ
130 Jacques	Lepine	Prof.	Brazil	University of Sao Paulo
131 Johan	Lindberg	Dr.	Sweden	NASA Goddard
132 Michael	Lindqvist	Dr.	Sweden	Onsala Space Observatory
133 Hauyu	Liu	Dr.	Taiwan	ASIAA
134 Sheng-Yuan	Liu	Dr.	Taiwan	Academia Sinica Institute of Astronomy and Astrophysics
135 Tie	Liu	Dr.	Republic of Korea	Astronomy and Space Science Institute
136 Elisabetta	Liuzzo	Ms.	Italy	Italian ARC , INAF-IRA-Italy
137 Fred	Lo	Prof.	United States	NRAO
138 Ryan	Loomis	Mr.	United States	Department of Astronomy, Harvard University
139 Ana	Lopez-Sepulcre	Dr.	Japan	University of Tokyo
140 Maria	Loukitcheva	Dr.	Germany	Max-Planck-Institut for Sonnensystemforschung
141 Julie	Lykke	Ms.	Denmark	Centre for Star and Planet Formation, Niels Bohr Institute, University of Copenhagen
142 A-Ran	Lyo	Dr.	Republic of Korea	Astronomy and Space Science Institute
143 Benjamin	Magnelli	Dr.	Germany	Argelander Institute for Astronomy
144 Ryu	Makiya	Dr.	Japan	Institute of Astronomy, University of Tokyo
145 Diego	Mardones	Prof.	Chile	Universidad de Chile
146 Sebastian	Maret	Dr.	France	CNRS / IPAG
147 Rui	Marques Chaves	Mr.	Spain	IAC
148 Jesus	Martin-Pintado	Prof.	Spain	Centro de Astrobiologia (INTA-CAB)
149 Gautier	Mathys	Dr.	Chile	Joint ALMA Observatory
150 Yuichi	Matsuda	Dr.	Japan	NAOJ

Given	Family	Title	Country	Affiliation	Given	Family	Title	Country	Affiliation
151 Satoki	Matsushita	Dr.	Taiwan	ASIAA	226 Tsuyoshi	Sawada	Dr.	Chile	Joint ALMA Observatory
152 Mikako	Matsuura	Dr.	United Kingdom	University College London	227 Peter	Schilke	Prof.	Germany	University of Cologne
153 Ayumu	Matsuzawa	Mr.	Japan	The Graduate University of Advanced Studies	228 Eva	Schininnerer	Dr.	Germany	Max Planck Institute for Astronomy
154 Hugo	Messias	Portugal	Institute of Astronomy and Space Sciences, Portugal		229 Malte	Schramm	Dr.	Japan	AIST
155 Jennifer	Meyer	Dr.	United States	NRAO	230 nick	scoville	Prof.	United States	Caltech
156 Tomonari	Michiyama	Mr.	Japan	SOKENDAI,NAOJ	231 Akifumi	Seko	Mr.	Japan	Kyoto University
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158 Yusuke	Miyamoto	Dr.	Japan	Ibaraki University	233 Kartik	Sheth	Dr.	United States	National Radio Astronomy Observatory
159 Ryosuke	Miyawaki	Prof.	Japan	J. F. Oberlin University	234 Takashi	Shimonishi	Dr.	Japan	Kobe University
160 Munetake	MOMOSE	Prof.	Japan	Ibaraki University	235 Hiroko	Shinnaga	Dr.	Japan	NAOJ
161 Raffaella	Morganti	Prof.	Netherlands	ASTRON, Kapteyn Institute (Groningen)	236 Andrea	Silva	Ms.	United States	Tufts University
162 Kana	Morokuma	Dr.	Japan	NAOJ	237 John	Silverman	Dr.	Japan	Kavli IPMU
163 Kazuhito	Motogi	Dr.	Japan	Yamaguchi University	238 Kazimierz	Sliwa	Mr.	Canada	McMaster University
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167 Sebastien	Muller	Dr.	Sweden	Onsala Space Observatory	242 Kate	Su	Dr.	United States	University of Arizona
168 Kazuyuki	Muraoka	Dr.	Japan	Osaka Prefecture University	243 Yu-Nung	Su	Dr.	Taiwan	ASIAA
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171 Hiroshi	Nagai	Dr.	Japan	NAOJ	246 Satoko	Takahashi	Dr.	Chile	Joint ALMA Observatory
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174 Kouichiro	Nakanishi	Dr.	Chile	National Astronomical Observatory of Japan	249 Shuro	Takano	Dr.	Japan	Nobeyama Radio Observatory, NAOJ
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179 Sorahiko	Nukatani	Japan	NAOJ		254 Ken'ichi	Tatematsu	Prof.	Japan	National Astronomical Observatory of Japan
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181 Karin	Oberg	Prof.	United States	Harvard University	256 John	Tobin	Dr.	Netherlands	Leiden Observatory
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191 Ivan	Oteo	Mr.	Germany	University of Edinburgh, European Southern Observatory	266 Tomofumi	Umemoto	Prof.	Japan	Nobeyama Radio Observatory
192 Yoko	Oya	Ms.	Japan	The University of Tokyo	267 Yuji	Urata	Dr.	Taiwan	IANCU
193 Alison	Peck	Dr.	United States	NRAO	268 Gerrit	van der Plas	Dr.	Chile	University of Chile
194 Laura	Perez	Dr.	United States	NRAO	269 Ewine	van Dishoeck	Prof.	Netherlands	Leiden Observatory
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198 Gergo	Popping	Dr.	Germany	ESO	273 Yoshimasa	Watanabe	Dr.	Japan	Department of Physics, The University of Tokyo
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202 Jill	Rathborne	Dr.	Australia	CSIRO Astronomy and Space Science	277 Christine	Wilson	Prof.	Canada	McMaster University
203 Luca	Ricci	Dr.	United States	Caltech	278 Eva	Wirstrom	Dr.	Sweden	Department of Earth and Space Sciences, Chalmers University of Technology
204 Anita	Richards	Dr.	United Kingdom	JBCA, University of Manchester	279 Jong-Hak	Woo	Prof.	Republic of Korea	Soul National University
205 Dominik	Riechers	Prof.	United States	Cornell University	280 Henry	Wootten	Prof.	United States	NRAO/ALMA
206 Javier	Rodon	Dr.	Chile	European Southern Observatory	281 Kevin	Xu	Mr.	United States	Caltech/IPAC
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210 Elaine	Sadler	Prof.	Australia	University of Sydney/CAASTRO	285 Takahiro	Yanagida	Mr.	Japan	The University of Electro-Communications
211 Hideo	Sagawa	Dr.	Japan	Kyoto Sangyo University	286 Ya-Wen	Yo	Ms.	Taiwan	NTNU
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216 Nami	Sakai	Dr.	Japan	Faculty of Science, Department of Physics	291 Zhiyu	Zhang	Dr.	Germany	University of Edinburgh
217 Takeshi	Sakai	Dr.	Japan	The University of Electro-Communications					
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220 Dragan	Salak	Dr.	Japan	University of Tsukuba					
221 Vachail	Salinas	Ms.	Netherlands	Leiden University					
222 Alvaro	Sanchez-Monge	Dr.	Germany	University of Cologne					
223 Patricia	Sanhueza	Dr.	Japan	NAOJ					
224 Hidetoshi	Sano	Dr.	Japan	Nagoya University					
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A handwritten signature in black ink, appearing to read "ASIAA".