

Mizusawa VLBI Observatory

SKA Science WG

(MIZ-SKA-SWG)

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Summary of MIZ-SKA-SWG

- Established in May 2015
 - Based on previous internal symposia in Mizusawa VLBI Observatory in a past few years
 - Request cooperation from the Japan SKA Consortium
 - Discussion about possible SKA sciences as one of future plans of Mizusawa VLBI Observatory
 - But different point of view from the SKA Science WG in Japan SKA Consortium
- Important notice
 - Mizusawa VLBI Observaory has not yet selected SKA as our future plan; it is one of the possibilities
 - MIZ-SKA-SWG will not select/decline SKA as our future plan; we just discuss possible contributions to SKA

Goals

- Discussion about possible contributions of Mizusawa VLBI Observatory to future SKA sciences
 - How can we (=Mizusawa VLBI Observatory) develop our sciences (=VLBI, astrometry, Galaxy, AGN, AGB, SFR, etc) with future SKA observations?
 - How can we utilize our technical/engineering methods (=interferometry, VLBI, imaging, calibration, multi-beam, phase-referencing, etc) in the future scientific researches with SKA?
 - Is SKA worth devoting our resources compared with other future radio astronomy projects? If so, how should we do? (If not, we need further discussion about other projects.)

Membership

- Core members nominated by director and chair
 - From various fields of VLBI-related sciences
 - T. Hirota (NAOJ; Chair)
 - K. Hada, M. Honma, K. Motogi, N. Sakai (NAOJ)
 - K. Niinuma (Yamaguchi)
 - Y. Hagiwara (Toyo)
- Call other key persons for detailed information
 - K. Takahashi (Kumamoto)
 - H. Imai (Kagoshima)
- **WG meeting is not closed but open for anyone**

Future schedule

- WG meeting will be held twice per month
- Executive summary will be reported within one year (i.e. end of 2016 March or May)
- Interim report will be presented to community (i.e. today!)
- **WG meeting is not closed but open for anyone**

Activities in the last 1 year

- Mizusawa VLBI Observatory internal symposia
 - 2014/10/21
 - Discussion about some future plans including currently on-going projects (ALMA, SKA, sub-mm VLBI, satellite, etc)
 - 2014/12/18
 - Focusing on SKA as one of the future plans (but not regarded as the only future plan)
 - 2015/4/7
 - Review of the latest status of SKA by Akahori
- Continued to MIZ-SKA-SWG

Current activities (1)

1. 2015/05/18

- Discussion about policy, direction, etc of MIZ-SKA-SWG

2. 2015/06/08

- Report on previous discussion in internal symposia (Hirota)
- Report on astrometry WG in the Japan SKA Consortium (Imai)

3. 2015/06/26

- Review of Pulsar timing array with SKA (Takahashi)

4. 2015/07/16

- Review of SKA Science book: Paragi et al., Very Long Baseline Interferometry with the SKA (Sakai)

Current activities (2)

5. 2015/08/04

- Review of Pulsar timing array with SKA (Takahashi; continued)
- Review of SKA Science book: Hoare et al., The Cradle of Life and the SKA and Loinard et al., Tomography of Galactic star-forming regions and spiral arms with the Square Kilometre Array (Hirota)

6. 2015/08/10

- Review of SKA Science book: Anglada et al., Radio Jets in Young Stellar Objects with the SKA and Fuller et al., Star and Stellar Cluster Formation: ALMA-SKA Synergies (Motogi)

7. 2015/08/26

- Review of SKA Science book: Agudo et al., Studies of Relativistic Jets in Active Galactic Nuclei with SKA (Hada)

8. 2015/09/07

- Report of SKA Key Science Project Workshop 2015 (Takahashi)
- Review of Pulsar timing array with SKA (Takahashi; continued)
- Review of North American Array (Hirota)

Summary

- MIZ-SKA-SWG is established to discuss about SKA sciences as one of future plans of Mizusawa
- WG meeting will be held twice per month
- Executive summary will be reported within one year (i.e. end of 2016 March or May)
- **WG meeting is not closed but open for anyone**