# ALMA workshopのお知らせ ALMAとVLBIの連携に向けて

国立天文台水沢VLBI観測所 廣田朋也

## AIM of this workshop

- ALMA sciences with the highest resolution
  - Comparable to VLBI (<10mas)</li>
  - Expansion from VLBI to ALMA
  - Complement to VLBI
- Initial studies in the cycle 0
- Future work with the highest resolution
  - Full operation; longer baselines, higher frequency
- Start collaboration
  - Not only within radio/VLBI community
  - WITH wider field of astronomy

#### From the VLBI view

- Advantage of VLBI
  - Higher resolution in ALMA (<1 mas) 30 years ago!
  - Imaging of maser sources, AGN, and so on . . .
  - Proper motion measurements, astrometry
  - 3-dimentional velocity structure (in case of masers)
- Disadvantage of VLBI
  - Lowest (brightness) sensitivity ( >10<sup>9</sup>K)
  - Impossible to detect thermal dust continuum and molecular line emission
  - Hard to estimate physical parameters
- Complement by ALMA in the similar resolution

## First meeting

- 2011 June 1 at NAOJ
- In partucular for Cycle 0
- Program
  - Introduction; Hirota, Okumura, Nagai
  - Stellar Evolution; Kameno, Matsumoto, Imai
  - Galaxies and AGN; Hayashi, Doi, Nagai, Hada
  - ISM/SFRs; Motogi, Nagayama, Sugiyama, Sunada

http://veraserver.mtk.nao.ac.jp/restricted/
ALMAWS2011/index.html

### **Future**

- Workshop for each field will be scheduled
  - Review the cycle 0 proposal
  - Discuss about cycle 1 proposal
  - Study more toward full operation
- Please let me know your comments
  - Preferred date, venue, scientific theme,
     possible invited reviewer/speaker, and more ...

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