



# A kick-off meeting

E-KVN SWG  
2017 August 3

# Discussion plan

- Science WG meetings
  - KVN Science group leaders (June 12): suggestion of science cases
  - KVN internal discussion (Friday seminar, today): discussion, WG formation
  - Science WG meetings (July-October) (how often? weekly? bi-weekly? when? what?)
- Collection of interests from KaVA Science mailing list: A. Jung, Imai, Zhao, etc
- 1st workshop (any volunteer to talk?)
  - Radio telescope user's meeting (August 17-18):
  - invitation of researchers from East Asian regions based on the interests and the WG activity
- KAS meeting
  - October: presenting results of the pre-study on scientific justifications
- 2nd workshop
  - KaVA/EAVN joint science workshop (Nov. 21-23)
  - A workshop in honor of Dr. Cho's retirement (end Nov)
- White Paper for science cases
  - Korean version to fit in the formal report of the pre-study
  - English version to be published to e.g., JKAS

# E-KVN Science WG

- Members (15)
  - In KASI (11): T. Jung, D. Byun, JW Lee, SW Kim, KT Kim, BW Sohn, SH Cho, G. Zhao, J. Hodgson, J. Algaba, SS Lee
  - Outside KASI (4): Imai, A. Jung, Sawada-Satoh, JH Baek
- Mission
  - Discuss a scientific justification (science cases) for the E-KVN (KSP candidates?)
  - Write a white paper (WP) for science cases (in Korean/English)
- Meeting
  - regular meeting (bi-weekly, next meeting on Aug 22 at 3pm)
  - presentation on each science case voluntarily
  - drafting/revising the WP

# More discussion

- Algaba's talk
  - good to have additional parameter on the plot (resolution vs frequency), like time domain (for time domain astronomy)
    - Imai-san may discuss this issue in more detail
  - having shorter baselines yield a resolution matched multi-frequency science using existing VLBI data (e.g., VLBA 15GHz and EKVN 129GHz)
    - spectral index distribution
    - applicable to AGN jet sciences, but not to maser sciences
  - Low luminosity AGNs (LLAGN) would be one target for this kind of spectral index distribution
    - less Doppler boosted targets
    - may be powered by different mechanism to bright AGNs

# More discussion

- Hodgson's talk

- EKVN may be able to conduct a cosmology by observing AGNs (quiescent stage?) with longer (e.g. KVN-Mopra) baselines and high cadence (e.g., bi-weekly) monitoring
- high frequency and multi-frequency would also be useful.
- could start with xKVN projects (connecting KVN and Yebes) with a handful of high dec sources at large redshift