



2nd meeting of Extended-KVN SWG — White Paper —

2017 August 22

Sang-Sung Lee

White paper

- Author list and the order
 - all who contributed the paper (writing, comments, etc.)
 - alphabetical order? or in order of contribution decided by a leading author? →
not determined yet
- Contents (changed):
 - Introduction: KVN and Extended-KVN
 - Expected performance of EKVN
 - Science cases of EKVN (a few sub-sections each)
 - Case1 (for current KVN science cases):
 - Review of current KVN sciences
 - scientific justification for EKVN science with shorter or longer baselines
 - Case2 (for new EKVN science cases):
 - scientific justification for EKVN science with shorter or longer baselines
 - Summary

White paper

- Title(tentative): *Science cases towards an extended Korean VLBI Network*
- Introduction
 - review of KVN (Sang-Sung Lee):
 - review of Extended-KVN project (Do-Young Byun)
- Expected performance of EKVN (Taehyun Jung, Juan-Carlos Algaba, Do-Young Byun, Sang-Sung Lee)
 - current performance of KVN (including FPT)
 - a brief description of uv-coverage, sensitivity, etc. of EKVN
- Science cases of EKVN (see next page)
 - Case1 projects
 - Case2 project
- Summary (Sang-Sung Lee)

White paper

- Science cases of an extended KVN (a sub-section each)
 - Case1 (for current KVN science cases):
 - Evolved stars (Se-Hyung Cho)
 - for shorter baselines AGB star continuum, extended H₂O/SiO maser features
 - for longer baselines: high spatial resolution observations of SiO maser features
 - for high sensitivity: HCN maser (80G대역), SiO 86G maser ($v \geq 2$), 29SiO, 30SiO
 - iMOGABA (Sang-Sung Lee)
 - PaGAN (Sascha Trippe?)
 - SFR (Kee-Tae Kim): 85/95GHz Methanol Masers
 - MASK (Taehyun Jung): MASK2 for shorter and longer baselines
 - microquasars (Soon-Wook Kim): high frequency observations for shorter and longer baselines
 - AGN/GPS (Bong Won Sohn): high frequency observations for shorter and longer baselines
 - Case2 (for new EKVN science cases):
 - Cosmology with AGN monitoring (Jeffrey Hodgson)
 - Large radio telescope (D~40m?) (?)