

KaVA PET activities

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Performance **E**valuation **T**eam:

Sang-Sung Lee, Naoko Matsumoto (co-chair)

Motoki Kino (AGN), Hiroshi Imai (Evolved Stars)

Yuanwei Wu (Galactic Astrometry), Mikyoung Kin (SFR)
and Duk-Gyoo Roh (KJCC)

PET activities

- 2013 May 28 : PET launched
- 2013 June 03 : Establishing a check list of performance evaluation
- 2013 July 24 : 1st PET decision for 2013B open use
- 2014 July 04 : 2nd PET decision for 2014B open use
- 2014 July 26 : Update of the 2nd PET decision
- 2014 Sep 26 : 3rd PET decision for 2015A open use
- 2014 Nov 11 : Requesting test observations to SWGs
- 2015 Jan 16 : 4th PET decision for 2015B open use
- 2015 Feb 03 : New PET membership
 - Yuanwei Wu (GA: NAOJ), Mikyoung Kim (SFR: KASI), Motoki Kino (AGN: KASI), Hiroshi Imai (ES: Kagoshima Univ.), Sang-Sung Lee (KASI, co-Chair), Naoko Matsumoto (NAOJ, co-Chair)
- 2015 April 08 : 5th PET decision for 2015B open use
- 2015 July 07 : 6th PET decision for 2016A open use
- 2015 Sep 16 : Update of the 6th PET decision

PET activities

- 2015 Nov 25 : Requesting future prospects and test observations to SWGs for 2016B
- 2015 Dec 09: PET Skype meeting (2015 Dec 09, 2016 Jan 21)
- 2016 Jan 27: 7th PET decision for 2016B open use
- 2016 Feb 4: Update of the 7th PET decision for 2016B
- 2016 Feb 16: A new PET member : Duk-Gyoo Roh (KJCC: KASI)
- 2016 Feb 22: PET f2f meeting in Krabi
- 2016 Mar 8: Update of the 7th PET decision for 2016B
(K/Q/W Hybrid and Fast antenna-nodding)
- 2016 Aug 30: 8th PET decision for 2017A open use (No newly opened mode)

Modes	Evaluating SWG	2015Mar (2015B)	2015Sep (2016A)	2016Mar (2016B)	2016Sep (2017A)	2017Mar (2017B)
C2 (128MHz x 2ch)	AGN	Obs(QO)	Obs/Corr	Obs/Corr	Corr	Decision
C3 (64MHz x 4ch)	AGN				Obs/Corr	Decision
C4 (32MHz x 8ch)	AGN	Analysis	Decision			
C4 high	ES					Obs/Corr/ Decision
2Gbps (512MHz)	AGN		Obs/Corr	Obs/Corr	Obs/Corr	Decision
Fast antenna nodding	GA	Obs/Corr	Analysis	Decision		
Dual-pol (K: Cont)	AGN	Obs/Corr (D-term)	Obs/Corr (D-term)	Analysis (D-term)	Obs/Corr (Imaging)	Decision
Hybrid	SFR, ES	Obs/Corr	Obs/Corr	Decision		
Wide field	SFR				Obs/Corr	Decision
Astrometry (Multi frequency)	ES, AGN	Obs	Obs/Corr	Obs/Corr	Obs/Corr	Decision
Astrometry (Absolute position)	GA, ES	Obs	Obs/Corr	Obs/Corr	Obs/Corr	Decision
Astrometry (Parallax level)	GA, AGN	Obs	Obs/Corr	Obs/Corr	Obs/Corr	Decision
Nobeyama 45 m	AGN/ES					Decision

List of future common-use observing modes under developing/discussion (Draft)

Version. Feb 22st, 2016

Modes	Evaluating SWG	Current situation	Test observation plan
Dual-pol (Q: Cont)	AGN	Under developing	End of this year
Dual-pol (Line)	ES	Under developing	End of this year
VERA K/Q quasi-Optics	AGN, ES	Under developing	After 2 years
Multi-fields	SFR	Test with current maximum spec of the Daejeon correlator	Observed in this April with C2 mode for wide-field. Data correlation had been finished in this Sep. with two phase center.

Discussion about new modes will be continued in future PET meetings (e.g., VERA 2-beam, Pulsar gating, etc.).

Decision status for 2017A

- Summary of decision status of candidate modes for open-use in 2017A
 - C2 =>No decision (AGN) => Decision II delayed to 2017B
 - Correlation problem with an integration time of 0.2s.
 - C3 => No decision (AGN, low priority) => Decision delayed to 2017B season.
 - Conducted test observations: evaluating after finishing C2 mode evaluation
 - Mainly for ATCA-KaVA observations
 - C4 (high) => No decision (ES) => Decision II delayed to 2017B season
 - Test observations will be conducted together with VERA K/Q Q.O. tests in this November.
 - 2 Gbps =>No decision (AGN) => Decision II for 2017B
 - Further test observations are supposed to be conducted in May(?): No news from KJCC.
 - KaVA+Nobeyama 45m (K, Q) => No decision (AGN/ES) =>Decision II for 2017B

Decision plan for 2017B

- Confirmed candidate mode of next opening in 2016B in the RM & PET meetings
 - C2 =>Under evaluating (AGN) => Decision II for 2017B
 - C3 =>Under evaluating (AGN) => Decision II for 2017B
 - C4 (high) =>Under evaluating (ES) => Decision II for 2017B
 - 2Gbps =>Under evaluating (AGN) => Decision II for 2017B
 - KaVA+Nobeyama 45m (K, Q) => Under evaluating (AGN/ES) =>Decision II for 2017B
 - Dual-pol (K, cont) => AGN => Decision for 2017B
 - Wide-field => SFR => Decision for 2017B
 - Astrometry (Multi-frequency) => ES, AGN => Decision for 2017B
 - Astrometry (Absolute position) => GA, AGN => Decision for 2017B

Thank you for your attention!