## The 7th International VLBI Technology Workshop



Monday 12 November 2018 - Thursday 15 November 2018

Aonang Villa Resort, Krabi, Thailand

## **Scientific Programme**

The 7th International VLBI Technology Workshop (IVTW2018) Ao Nang Villa Resort & Spa, Krabi, Thailand 12-15 November, 2018 Tentative Programme (version 15.10.2018)

Sunday, November 11, 2018

16:00-18:00 Registration

Monday, November 12, 2018

08.30 - 09.00 Registration

1st Session: Setting the Scene. Chair: tbd

09.00 – 09.40 Saran Poshyachinda, Welcome & Overview of NARIT's Vision for Radio Astronomy 09.40 – 10.15 Anton Zensus, RadioNet - the Successful Collaboration in Europe and Beyond

10.15 - 10.45 Coffee

10.45 – 11.20 Michael Lindquist, A Vision for the Future of the European VLBI Network

2nd Session: Networks & Observatories. Chair: tbd

11.20-11.45 Jeffrey Hodgson, Cosmological QUOKKA, a new project extending the KVN to Australia. Towards a future Asia-Pacific VLBI Network

11.45 – 12.10 Tim Natusch, A report from the AUT Warkworth (New Zealand) Radio Observatory 12.10 – 12.35 Guifre Molera, Construction of the VGOS radio telescope at the Metsähovi Geodetic Research Station

12.35 - 15.00 Lunch

15.00 - 15.30 Coffee

15.30 – 15.55 Phrudth Jaroenjittichai, Prospects and progress of the RANGD project

15.55 – 16.20 Arpad Szomoru, Technology and the Future of the EVN

16.20 - 16.45 Zhong Chen, Shanghai VLBI Center Activity

16.45 – 17.10 Leif Helldner, Onsala Twin Telescope's status

19:00-21:00 Welcome dinner

Tuesday, November 13, 2018

3rd session: Correlators. Chair: tbd

09.00 – 09.35 Keith Vanderlinde, Real-time Transient Localization via Videocon

09.35 - 10.10 Jonathan Weintroub, SWARM: A 32 GHz Correlator and VLBI Beamformer for the Submillimeter Array via Videocon

10.10 - 10.35 Chris Phillips, GPU processing for the ATCA and VLBI

10.35 - 11.05 Coffee

11.05 – 11.40 John Tuthill, ASKAP Digital Beamformer and Correlator

11.40 – 12.15 Se-Jin Oh, Development of Software Digital Filter based on GPU for East-Asian VLBI Network

12.15 - 12.40 Arpad Szomoru, JUC - the JIVE UniBoard Correlator

12.40 - 14.00 Lunch

14.00 – 14.35 Simone Bernhart, Distributed Correlation for VGOS observations

14.35 – 15.10 Voytsekh Ken, RASFX: A VLBI GPU-based software correlator

15.10 - 15.40 Coffee

15.40 – 16.15 Mark Kettenis, Past present and future of software correlation for VLBI

16.15 – 17.15 Panel discussion (topic and panel members - tbd)

Wednesday, November 14, 2018

Morning: Social activities - 4-Island tours (optional)

12.30 - 14.00 Lunch

4th session: Digital backends. Chair: tbd

14.00 – 14.35 Tomoaki Oyama, (Awaiting for title)

14.35 – 15.00 Tasso Tzioumis, Future VLBI systems

15.00 - 15.30 Coffee

15.30 – 15.55 Evgeny Nosov, Project of Direct Sampling Digital Backend for Quasar VLBI-network

15.55 – 16.20 Cormac Reynolds, VLBI Developments in Australia 16.20 – 16.55 Ewan Barr, Designing Universal Radio Astronomy Backends

19:00 - 21:00 Conference Dinner

Thursday, November 15, 2018

3rd session: Correlators, continued. Chair: tbd

09.00 – 09.35 Victor Pankratius, (Awaiting for title) via Videocon 09.35 – 10.10 Jan David Mol, LOFAR: A decade of correlating in a software telescope

10.10 - 10.40 Coffee

10.40 - 11.15 Weimin Zheng, The current status and future development of CVN correlator

4th session: VLBI techniques, data analysis. Chair: tbd

11.15 – 11.50 Willem Baan, VLBI and RFI Issues

11.50-12.25 Maria J. Rioja, The Power of Simultaneous Multi-Frequency Observations for mm-VLBI and Astrometry

12.40 - 14.00 Lunch

14.00 – 14.25 Masafumi Ishigaki, Analysis Report of AOV Observations

14.25 – 14.50 Jun Yang, Toward determining a more stringent constraint on the variability of gravitational constant G via VLBI astrometry on PSR J0437-4715

14.50 - 15.20 Coffee

15.20 - 15.45 Aard Keimpema, Finding and localising Fast Radio Bursts using VLBI arrays

15.45 – 16.45 Panel discussion (topic and panel members tbd)

16.45 - 17.00 Closing remarks