Dr. Utane Sawangwit

Senior Research Astronomer,
High Performance Computing & Data Handling Project leader
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Education

2011 Ph.D. in Physics (Extragalactic astrophysics and Cosmology)

Durham University, Department of Physics, 'Testing the Standard Cosmological Model'

2006 B.A.+ M.Sci.Hons, Natural Sciences (Experimental and Theoretical Physics)

University of Cambridge, Cavendish Laboratory, 'Evolution of young radio sources'

Research Interests

- Cosmology and Large Scale structures of the Universe, Cosmological Surveys, AGN evolution.
- Computational Astrophysics and Cosmology, Data Intensive and data mining in astronomy.

Grants & Awards

- PI of two successful applications for NARIT-STFC Newton Fund: Capacity Building on Data Handling in astronomy ('Big Data with GOTO'; UK-PI: Dr. J. Mullaney, Sheffield U. & 'Astronomical Data flow for Robotic telescopes'; UK-PI: Dr. R. Smith, LJMU), 2017-2018.
- Australian Government DFAT Australian-ASEAN Council grant for Capacity Building and technology transfer on Data intensive astronomy and development of radio astronomy in Thailand, 2016 - 2019, (Thai PI, Australian PI: Prof. Andreas Wicenec).
- Institute for the Promotion of Teaching Science and Technology (IPST) of The Royal Thai Government, full-funding for studying Physics in the UK, 2001-2011.
- Clare College excellence result awards, University of Cambridge, 2003 & 2004.
- Represented Thailand at the 31st International Physics Olympiad, U. of Leicester, UK, 2000.

Work/Teaching experience and service to the profession

- Mentor of a successful Thailand Research Fund (TRF) grant application, Dr. Pimpunyawat Tummuangpak, Astronomy and Astrophysics group, Khon Khaen University, 2016 - present.
- Adjunct Lecturer, High Energy Astrophysics and Cosmology, Astronomy Master program, Chiang Mai University & Suranaree University of Technology, 2015 - present.
- Lecturer, Xinglong (NAOC) Astrophysical School,'Observational Cosmology', China, Dec 2015.
- Occasional reviewer for Monthly Notice of Royal Astronomical Society (MNRAS) journal.

- Lecturer, IAU International School for Young Astronomers, Chiang Mai, Thailand, Nov 2014.
- Short-term post-doctoral research, Durham University, UK, 2011 - 2012.
- Teaching Assistant, Astrophysics and Cosmology undergrad. course, Durham, UK, 2007–2010.

Selected Conferences, Workshops and Schools

- NARIT-STFC Big Data analytics workshop with GOTO data, Mar 2017 (SOC and organizer).
- NARIT COMputational Astrophysics and Cosmology (COMAC) school, Nov 2016 (SOC and main organizer).
- East Asia VLBI Workshop, Guiyang, PR.China, November 2016.
- NARIT- ICRAR capacity building on Data Intensive Astronomy as part of the two-institutes collaboration, Perth, Australia, September 2016.
- The NARIT-STFC Newton Fund capacity building in data handling, Bangkok, September 2016.
- Advanced analytIcal Method in cosmology and HIgh energy physics (AIMHI) workshop, Chiang Mai, June 2016, (SOC and main organizer).
- The 1st and 2nd South East Asian Astronomy Network (SEAAN) computational Modeling and Data analysis in astronomy (SEA-MODA) workshop, Thailand, May 2013 (Chiang Mai) & 2015 (Phuket) (SOC and main organiser).
- 'Durham VST ATLAS Survey Kick-off' workshop, Durham, UK, December 2011.

Selected Publications

- Chantavat, T., **Sawangwit, U.** & Wandelt, B. D., 'Void Profile from Planck Lensing Potential Map', 2017, ApJ, 836, 156.
- Chehade, Ben, Shanks, T., Findlay, J.; Metcalfe, N., **Sawangwit, U.** et al., 'The 2QDES Pilot: the luminosity and redshift dependence of quasar clustering', 2016, MNRAS, 459, 1179.
- Chantavat, T., **Sawangwit, U.**, Sutter, P. M. & Wandelt, B. D., 'Cosmological parameter constraints from CMB lensing with cosmic voids', 2016, Phy.Rev.D.,93, 043523.
- Sangka, A., **Sawangwit, U.** & Sanguansak, N., 'Voids Lensing of the CMB at High Resolution', 2015, PKAS, 30, 397.
- **Sawangwit, U.**, Shanks, T., Croom, S. M. et al., 'Measuring BAO and non-Gaussianity via QSO clustering', 2012, MNRAS, 420, 1916.
- **Sawangwit, U.**, et al., 'Angular correlation function of 1.5 million luminous red galaxies: clustering evolution and a search for baryon acoustic oscillations', 2011, MNRAS, 416, 3033.
- **Sawangwit, U.** & Shanks, T., 'Beam profile sensitivity of the WMAP CMB power spectrum', 2010, MNRAS Letters, 407, L16.
- **Sawangwit, U.**, Shanks, T., Cannon, R. D. et al., 'Cross-correlating WMAP5 with 1.5 million LRGs: a new test for the ISW effect', 2010, MNRAS, 402, 2228.
- **Sawangwit, U.** & Shanks, T., 'Is everything we know about the universe wrong?', 2010, Astronomy & Geophysics, RAS, 51, 5.14.