



# Supachai Awiphan

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## Current position

- **2016-Present**    **Researcher**, National Astronomical Research Institute of Thailand (NARIT), Thailand

## Education

- **2012-2016**    **Ph.D. (Astronomy and Astrophysics)**, The University of Manchester, United Kingdom
  - **Thesis:** Exomoons to Galactic structure: High precision studies with the microlensing and transit methods
  - **Supervisor:** Dr. Eamonn Kerins
- **2011-2012**    **M.Sc. (Astronomy and Astrophysics) (Merit)**, The University of Manchester, United Kingdom
  - **Thesis:** The detectability of habitable exomoons with Kepler
  - **Supervisor:** Dr. Eamonn Kerins
- **2006-2010**    **B.S. (Physics) (First class honors)**, Chiang Mai University, Thailand
  - **Thesis:** Variation in orbital period of W UMa-type contact binaries
  - **Supervisor:** M.L. Aniwat Sooksawat

## Scholarships

- **2012-2015**    **President's Doctoral Scholar Awards (PDS)**, The University of Manchester, United Kingdom
- **2011-2016**    **The Royal Thai Government Scholarship**, Ministry of Science and Technology, Thailand
- **2008-2011**    **Junior Science Talent Project (JSTP) Scholarship**, Ministry of Science and Technology, Thailand
- **2006-2010**    **Development and Promotion of Science and Technology talent project (DPST) scholarship**  
Ministry of Education, Thailand

## Research experiences

- **2016-Present**    **Researcher**
  - Perform transit timing variation and transmission spectroscopy analyses of Neptune-like exoplanets
  - Perform transiting exoplanet follow-up observations with the KELT follow-up team
  - Perform microlensing exoplanet follow-up observations with the Gaia follow-up team
  - Develop automated selection program for transiting exoplanet observation
  - Determine effect of photocentric transit timing variation and photocentric transit duration variation of exomoon
- **2011-2016**    **Postgraduate research**
  - **Advisor:** Dr. Eamonn Kerins (University of Manchester)
  - Performed transit timing variation and transmission spectroscopy analyses of hot Neptune GJ3470b
  - Determined the detectability of habitable exomoons with Kepler-class photometry
  - Developed Manchester-Besancon microlensing Simulator (MaBulS; see <http://www.mabuls.net>)
  - Confronted Galactic structure with MOA-II and MaBulS microlensing data
- **2010**    **Visiting scientist**
  - **Advisor:** Dr. Elisa Bernardini (DESY Zeuthen)
  - Performed statistical study of long term Gamma-Ray data from BL Lac objects

- **2008-2010 Undergraduate research**
  - *Advisor:* M.L. Aniwat Sooksawat and Dr. Siramas Komonjinda (Chiang Mai University)
  - Determined variation in orbital period of W-UMa type contact binaries
  - Performed photometric study of the contact binary EQ Tauri

## Publication list

- D.E. Mrktichian, N. A-thano and **S. Awiphan**, *Discovery of short-period oscillations in the mass-accreting component of BD Vir*, 2017, IBVS, 63, 6209
- **S. Awiphan**, E. Kerins, S. Pichadee, et al., *Transit timing variation and transmission spectroscopy analyses of hot Neptune GJ3470b*, 2016, MNRAS, 463, 2574
- **S. Awiphan**, E. Kerins and A.C. Robin, *Besancon Galactic model analysis of MOA-II microlensing: evidence for a mass deficit in the inner bulge*, 2016, MNRAS, 456, 1666
- **S. Awiphan** and E. Kerins, *The detectability of habitable exomoons with Kepler*, 2013, MNRAS, 432, 2549

## Proceedings

- S. Pichadee, S. Komonjinda, **S. Awiphan**, E. Kerins, W. Rujopakarn and S. Poshyachida, *Photometric observation and analysis of hot Uranus Exoplanet GJ3470b by transit method*, 2015, Siam Physics Congress 2015
- **S. Awiphan**, E. Bernardini and K. Satalecka, *Statistical study of long term Gamma-Ray data*, 2011, The 11<sup>th</sup> Asian-Pacific regional IAU Meeting (APRIM2011)
- **S. Awiphan** and S. Komonjinda, *Variation in orbital period of contact binaries*, 2011, Siam Physics Congress 2011
- **S. Awiphan**, S. Komonjinda and A. Sooksawat, *A photometric study of the contact binary EQ Tauri*, 2010, Siam Physics Congress 2010
- **S. Awiphan**, S. Komonjinda and A. Sooksawat, *Variation in orbital period of W-UMa type contact binaries*, 2010, The 5<sup>th</sup> Conference on Science and Technology for Youth, Thailand
- **S. Awiphan**, S. Rattanasoon and A. Sooksawat, *Variation in orbital period of W-UMa type contact binaries*, 2009, Siam Physics Congress 2009

## Awards

### 2015

- **Highly recommended in Pure Science**, Anglo-Thai Society Education Awards 2015, United Kingdom

### 2010

- **Thailand representative of DESY Summer Student Programme 2010**, selected by HRH Princess Maha Chakri Sirindhorn, Thailand
- **Winner prize in the 3<sup>rd</sup> Thailand undergraduate student research project in Physics**, Thai Physics Society
- **Best score of Bachelor Degree in Physics students**, Faculty of Science, Chiang Mai University, Thailand
- **Winner prize in oral presentation in Physics**, Faculty of Science, Chiang Mai University, Thailand

### 2008

- **Best score of the year in Physics students**, Faculty of Science, Chiang Mai University, Thailand

### 2007

- **Best score of the year in first year students**, Faculty of Science, Chiang Mai University, Thailand

### 2004

- **Silver medal and the best in practical**, The 1<sup>st</sup> Thai Astronomy Olympiad, Thailand
- **Honorable mentions**, The 3<sup>rd</sup> Thai Physics Olympiad, Thailand