PANISARA THEPTHONG

panisara.thepthong@gmail.com ⋄ +66805024682
orcid.org/0000-0001-9597-1448

PERSONAL PROFILE

I am a PhD student in Space Physics at LPC2E, focusing on solar wind data analysis using spacecraft measurements. My research interests center on solar phenomena that drive and modulate interplanetary space weather, investigated through a combination of in-situ and remote-sensing observations. I am currently working on Type III radio-burst analysis using data from Parker Solar Probe (PSP) and Solar Orbiter (SolO). I am skilled in scientific data analysis, in-situ measurements, and quantitative research.

EDUCATION

LPC2E, University d'Orléans — Orléans, France
PhD — October 2024 - Present
Thesis Project: Analyzing Solar Type III Radio Bursts with Solar Orbiter and Parker Solar Probe
Supervisor: Matthieu Kretzschmar and Milan Maksimovic

Kasetsart University — Bangkok, Thailand
Master of Science (M.Sc.) in Physics — June 2022 - July 2024
GPA. 3.83
Thesis Project: Scale and Time Dependence of Alfvénicity in the Solar Wind as Observed by the Parker Solar Probe.
Supervisor: Asst. Prof. Peera Pongkitiwanichakul and Prof. David Ruffolo
Bachelor of Science (B.Sc.) in Physics — August 2018 - April 2022
GPA. 3.55 (First-class honors)

The Prince Royal's College — Chiangmai, Thailand
School — 2005 - 2018

TECHNICAL EXPERTISE AND LANGUAGES

Programming	Python, Fortran, Javascript
Languages	Thai (Native), English (Professional working proefficiency), French (Beginner)

PUBLICATIONS

1. Subash Adhikari et al. "Characterization of the Trans-Alfvénic Region Using Observations from Parker Solar Probe". In: *arXiv e-prints*, arXiv:2510.07472 (Oct. 2025), arXiv:2510.07472. DOI: 10.48550/arXiv.2510.07472. arXiv: 2510.07472 [astro-ph.SR]
2. David Ruffolo et al. "Observed Fluctuation Enhancement and Departure from WKB Theory in Sub-Alfvénic Solar Wind". In: 977.1, L19 (Dec. 2024), p. L19. DOI: 10.3847/2041-8213/ad9727. arXiv: 2409.02612 [astro-ph.SR]
3. Rohit Chhiber et al. "The Alfvén transition zone observed by the Parker Solar Probe in young solar wind - global properties and model comparisons". In: 533.1 (Sept. 2024), pp. L70–L75. DOI: 10.1093/mnrasl/slae051. arXiv: 2405.10437 [astro-ph.SR]
4. Panisara Thepthong et al. "Scale and Time Dependence of Alfvénicity in the Solar Wind as Observed by the Parker Solar Probe". In: 962.1, 37 (Feb. 2024), p. 37. DOI: 10.3847/1538-4357/ad1592. arXiv: 2312.08707 [astro-ph.SR]
5. David Ruffolo et al. "Domains of Magnetic Pressure Balance in Parker Solar Probe Observations of the Solar Wind". In: 923.2, 158 (Dec. 2021), p. 158. DOI: 10.3847/1538-4357/ac2ee3. arXiv: 2110.08506 [astro-ph.SR]

CONFERENCES AND WORKSHOPS

1. **Planetary, Solar and Heliospheric Radio Emissions X (PRE X)** Marseille, France
   Oral Presentation Jun 2025
   Presented an oral talk titled "Characterization of Fluctuations in Solar Type III Radio Spectra Observed by PSP and SolO."
2. **School on Cross-scale Coupling of Heliophysics Systems** L'Aquila, Italy
   Attendee May 2025
3. **European Geosciences Union (EGU) General Assembly 2025** Vienna, Austria
   Poster Presentation May 2025
   Presented a poster titled "Joint Analysis of Solar Type III Radio Bursts with Parker Solar Probe and Solar Orbiter" and attended sessions aligned with my research interests.
4. **Journées Jeunes Chercheurs (JC1)** Toulouse, France
   Attendee Apr 2025
   Met CNES correspondents and participated in scientific discussions with early-career researchers.
5. **RPW Consortium 31** Athens, Greece
   Oral Presentation Nov 2024
   Gave a presentation on Alfvénicity in the solar wind (previous work) and preliminary results from Solar Type III radio-burst analysis using Parker Solar Probe and Solar Orbiter observations.
6. **Particle Detection: From Ground to Space and Space Weather Impacts (Workshop)** Chiang Mai, Thailand
   Attendee Feb 2024
   Participated in talks and hands-on activities focused on space weather and particle detection.
7. **The 14th International Fundamental Science Congress (IFSC)** Bangkok, Thailand
   Oral Presentation Aug 2023
   Presented an oral talk titled "Scale and Time Dependence of Alfvénicity in the Solar Wind as Observed by the Parker Solar Probe."
8. **Thai Space Physics 2023** Bangkok, Thailand
   Oral Presentation Aug 2023
   Presented results on the scale and time dependence of Alfvénicity in the solar wind as observed by the Parker Solar Probe.
9. **American Geophysical Union (AGU) Fall Meeting 2022** Online
   Poster Presentation Dec 2022
   Presented a poster titled "Scale-Dependent Alfvénicity of Super-Alfvénic and Sub-Alfvénic Solar Wind Observed during Parker Solar Probe's 8th Orbit."
10. **Second Annual Parker Solar Probe Conference (Parker Two)** Online
    Poster Presentation Jun 2022
    Presented a poster titled "Alfvénicity of Velocity and Magnetic-Field Increments during Parker Solar Probe 8th Orbit."
11. **European Geosciences Union (EGU) General Assembly 2022** Online
    Short Oral Presentation May 2022
    Presented a short oral talk titled "Alfvénicity of Velocity and Magnetic-Field Increments Observed by Parker Solar Probe."
12. **Thai Space Physics 2022** Bangkok, Thailand
    Oral Presentation Sep 2022
    Presented results on magnetic-field domain structure and progress on Alfvénicity in the solar wind.
13. **Thai Space Physics 2021** Bangkok, Thailand
    Attendee Aug 2021
    Attended research presentations on space plasma physics and cosmic rays from multiple universities in Thailand.

EXPERIENCE

Teaching Experience

- Private Mathematics Tutor 2022 - 2023
- Teaching Assistant, Kasetsart University 2021
  - General Physics I
- Tutor for Calculus I 2019
  - Volunteered as a peer tutor for first-year students in the department's academic support activities.

Outreach Activities

- Staff in Astronomy Club, Kasetsart University 2018 - 2022
  - Organized the camp and activities to provide knowledge in Astronomy to undergraduate students.
- Physics Battle 8th 2020
  - Organized the Physics competition for high school students and handled administrative paperwork.

Personal Projects

- Role & Roll Dice Roller 2025 - Present
  - Developed a web-based dice-rolling tool with character sheet support for a Thai tabletop role-playing game (TTRPG) system.(`https://look2ed.github.io/rolenroll_dice/`)

SCHOLARSHIPS AND AWARDS

- Doctoral Contract (PhD Grant), LPC2E (CNRS/Université d'Orléans) 2024–2027
- Outstanding Academic Achievement Award (M.Sc. graduate), Academic Year 2023 2024
- Best Oral Presentation Award (Physical Science Session), 14th IFSC 2023
- Kasetsart University Graduate School Fellowship (support for M.Sc. studies) 2022–2023