

HOW on OAR 2023
Hack Challenge:
Observing Strategies
Deadline (Aug 30th, 2023 at 23:59)

You are asked to be in the shoes of an observational astronomer.

Review literature (<https://ui.adsabs.harvard.edu/>), and come up with a science goal or idea you want to test and explore using observation from the 2.4-m Thai National Telescope (TNT) on top of Doi Inthanon. In this challenge, your team will have to come up with a draft observing proposal for the TNT with the instrument called ULTRASPEC (http://www.vikdhillon.staff.shef.ac.uk/ultraspec/ultraspec_tnt.html).

Think of something you can explore with a fast photometry camera!

There are 7 sections of the proposal below. Section (A)+(B)+(C) must be less than 1,500 words total (or 2 A4 pages). The maximum number of figures allowed is 3. And please keep the cumulated word counts of the entire proposal to 3,000 words.

A) Scientific Rationale:

Give a full description of project scientific justification including any relevant figures and references.

B) Observational Requirements:

e.g. camera, filters, seeing, observing mode, photometric conditions, exposure time etc. needed in order to reach a required S/N level for the scientific analysis proposed in A)

C) Previous allocation:

if applicable, provide a brief summary of observations carried out with NARIT facilities related to this proposal, and their outcome

D) Justification of requested observing time and lunar phase:

e.g. need to observe m objects \times N exposures \times T seconds/exposure to reach S/N over n nights. Make sure to include overheads, especially for non-standard calibrations or repeated telescope pointings.

E) Strategy for data reduction and analysis:

Publicly available software/pipeline or tailor-made software for any specific purposes including data management if relevant.

F) Time constraints:

Impossible nights/months due to astronomical reasons, any consecutive nights required, any global wide organized campaign requirement, source variability period issue.

G) Applicant's publications related to the subject of this proposal during the last 3 years (maximum 10 papers):

....