

TDE Meeting Notes 20210303

1. Matthew updates:

- (1) Lost several observations due to shutter malfunction. Fixed
- (2) Chat with Matt Nicholl (new collaborator). He will mainly focus on AGN/TDE on ZTF. Will be Matt + Evan (Matt's grad student) on AGN flaring, and potentially a postdoc.

Resources: two personnel, can help with scanning; LT u-band / polarimetry / classification. Not for the existing program. Need to apply for LT time for upcoming semesters.

Science: weird nuclear transients. Interested in searching off-nuclear TDEs.

Matthew will draft a document, so we can discuss next week.

2. Organization

Wenbin, as a theorist, brought up the point that it is not very clear what new science the group is focusing on for ZTF-II. Of course we want to push the flux limit to fainter. But what else? For example, there are many big open questions: what is the reason for TDE line evolution? What is the origin of optical and X-ray emission? Is there a systematic study for X-ray properties? This group should better organize to address these questions in a collective way.

As a first step, please add your science projects to the Twiki page:

http://www.oir.caltech.edu/twiki_ptf/bin/view/ZTF/Projects

As a second step, let us work on upcoming proposals together!

3. Proposals:

- (1) **Chandra (ddl Mar 16)**: Yuhan is working on eROSITA sample. Still need to ask SRG group for approval.
- (2) **Keck+P200: (ddl COO Apr 1, not sure about NASA)**:
SRK & Yuhan will apply for LRIS & P200 for classification.
Another common interest is host galaxy spectroscopy. Suvi & Erica are thinking about applying for NASA/KCWI time (for the ZTF-I sample); Shri & Yuhan are thinking about ESI time (for all known TDEs). Maybe we can better coordinate this?
- (3) **Gemini (ddl Apr 1)**: Yuhan has been slow, will hopefully talk with Adam soon and update people on the Gemini program next week.
- (4) **HST (ddl April 2)**: Lin, Suvi, Brad, Sjoert et al. are interested. There are two possible programs: (i) host galaxies (ii) follow up of TDEs. If Matt joins, he might be able to contribute to (i). People need to think about (ii) together.

4. Scanning from last week:

<https://fritz.science/source/ZTF21aamkxb> assigned to tonight

5. Interesting transients

<https://fritz.science/source/ZTF19aaciohh>: Jean works on this VLASS transient. SEDM featureless blue spectrum during the flaring. There will be new VLA data coming up.

<https://fritz.science/source/ZTF18aasyvkn>: might be a changing look AGN or slow TDE, not sure.

6. Discussion of TDEs on the BPT diagram
7. News from Sjoert:
 - (1) One more ZTF TDE is detected in VLA. ATel will be sent later today.
 - (2) Nordiac telescope, JH infrared photometric follow up of TDE approved, monthly cadence. Starts in April. One year program. With Eric Kool and non-ZTF collaborators.