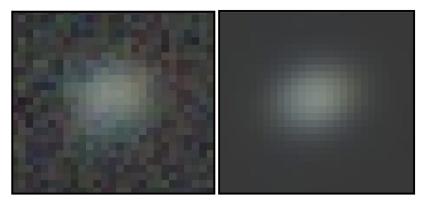


Newsletter #95, August 21st 2019

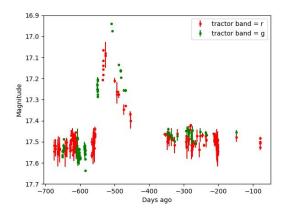
If the newsletter does not look good in your email, check the pdf here!

A new pipeline by Charlotte Ward and Peter Nugent

"We have developed a forced photometry pipeline for ZTF which uses Tractor (D. Lang et al. 2016) forward modelling. This pipeline produces models of transient positions and their host galaxy's profile using deep, high resolution Legacy Survey images from three bands along with any combination of PanSTARRS, ZTF and PTF images. It then applies these models to fit the transient flux across single epochs from multiple surveys. A major advantage of this method is that it can exploit deeper and higher resolution surveys to produce good models of sources which are blended in lower resolution images or are very faint. We plan to use this pipeline to produce light curves for faint transients across PTF and ZTF".



Left: A coadded DECam image for a g=21.57 magnitude host galaxy. Right: The Tractor model generated from the DECam images. This model was then used for PTF forced photometry to check for the presence of a faint transient.



Light curve for Ned Stark (ZTF18aabtxvd) generated with the Tractor forced photometry pipeline, showing the combined galaxy and TDE magnitude.

Minutes of Wednesday afternoon ZTF meetings at Caltech.

You can now view these minutes on the TWiki here.

News from working groups

Cosmology with type Ia SNe + AMPEL:"We are now setting up a new rerun of of all alerts so far with the intention of producing a base set of unbiased supernova lightcurves upon which we aim to write the first cosmology papers this fall. Let us know if other analysis or searches should be added into this run. As Steve was visiting DESY for the last weeks, we have also discussed ways in which the search for Infant SNe can be effectivised."

AGNs and TDEs:"The ZTFbh SWG is working on the TDE sample papers, and Sara's Changing-Look LINER paper was accepted to ApJ! Stay tuned for an official announcement in the newsletter publications section and a tweet. Some of the ZTFbh SWG attended the "Quasars in Crisis" conference in Edinburgh last week, which was during the Fringe Festival, and we had a special SWG excursion to "Thrones! The Musical", a Musical Parody about Game of Thrones, which was hilarious and very important for SWG bonding. On the nuclear transients front, we have several new TDE candidates that we are following up with Swift, and may have our next confirmed TDE, SandorClegane, any day now."

The papers corner:

Please keep us updated about your submitted/published papers, they will be advertised here.

Please send Joy Painter, the Astronomy Librarian at Caltech, links to papers as soon as soon as they are published. They will be kept track of here.

Reminders:

- PublicAlerts:There is a <u>link</u> to the alerts archive on the <u>website!</u>
- Please help us keeping track of all the available softwares! A preliminary list is available on the <u>twiki</u>. Let us know if you are building a software which you think could benefit (or be relevant to) a large portion of the collaboration.
- **ZTF general slack channel**: Please join through this <u>link!</u>
- If you want to get access to the **ZTF data** via the IRSA interface, please request data access to the communication coordinators: ztf.communication.coordinators@gmail.com
- -Archive GUI now ready! The interactive image search, filtering and visualization tool is now ready ().
- The ZTF Twitter account is now active! https://twitter.com/ztfsurvey Re-tweet @ztfsurvey!
- To use the **url shortener**(e.g. during telecons, talks, in emails), navigate to http://zwicky.tf/shorten (username: ztf password:16chips) and type in the URL you want shortened.

- The **Wiki page** is active! Check it out at http://zwicky.tf/wiki. To request access, please email us at ztf-communication.coordinators@gmail.com

"That's the great thing about a tractor. You can't really hear the phone ring." – Jeff Foxworthy

Have a great and productive week!

Thomas and Maayane