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Newsletter #170 May 26th 2021

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ZTF newsletter changes (Erik Kool, Igor Andreoni)

After ~1.5 year as ZTF communication coordinators, we will be hanging up our boots! Ivona Kostadinova will take over our responsibilities, including putting together and circulating this newsletter. We would like to thank everyone who has provided content for the past 60 editions, it was a pleasure getting to know and sharing all the fantastic research done in the ZTF partnership.

News from Fritz (Ari Crellin-Quick)

- ZTF light curves can now be saved to Fritz via the Archive page
- TNS names now appear on the source page and scanning page (as links)
- Users can select a site-wide role for new users when inviting via the Group page
- Source queries have been significantly optimized
- We have implemented group-specific source saving permission which will allow group admins to determine which group members are allowed to save sources to the group (this will be deployed later this week).
- Also to be deployed later this week are user-specific scanning profiles -- save any number of frequently-used queries and quickly load them on the scanning page to greatly reduce the number of clicks.
- Many other new features, bug fixes & optimizations.

News from working groups

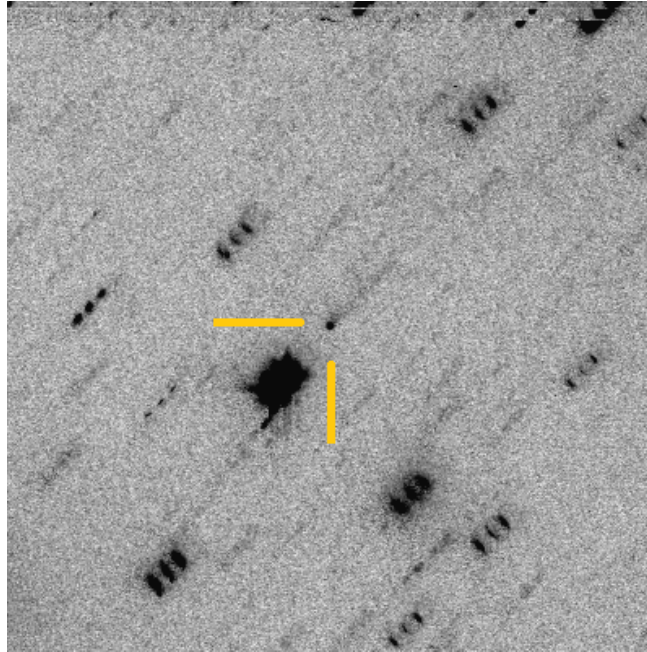
Galactic and M31 Science:

“We are improving our Fritz filters. Micheal Kuhn is working on a filter for YSO that implements fitting of a trend. Eric Bellm is working with his postdoc to implement an X-ray crossmatch filter. We also continue to mine the archival data; Kevin Burdge is searching all data and finding some new double white dwarf binary systems.”

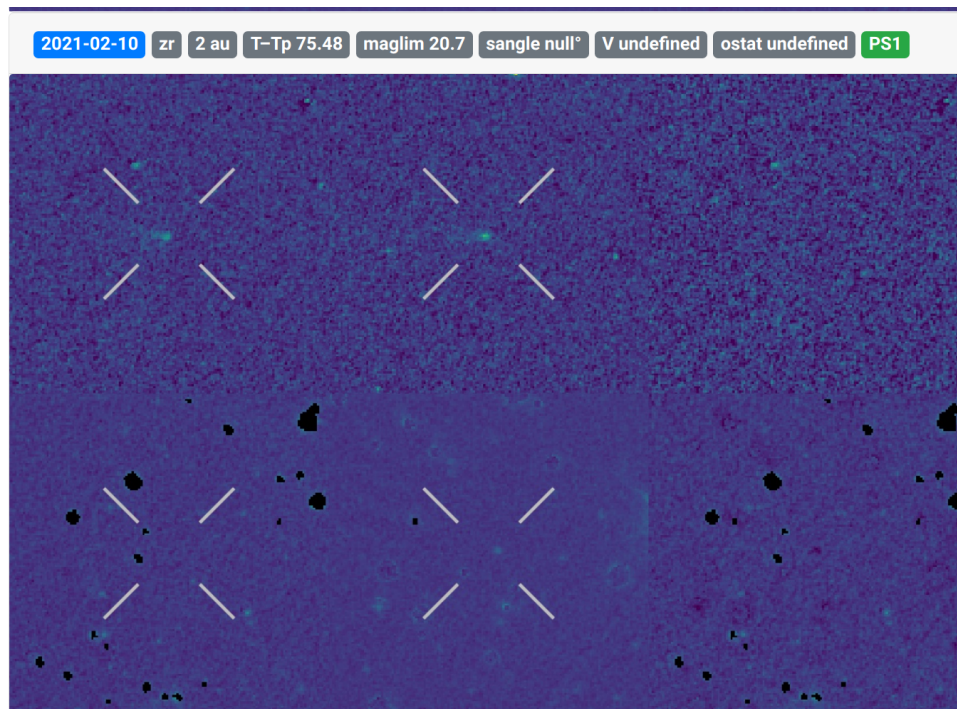
Solar System:

“On the 5th of April, we reported our discovery on the active asteroid 2005 XR132 using the Lulin One-meter Telescope under a framework of optical observation on dynamically unstable outer main-belt

asteroids. Below is a 1440 s exposure in R-band using the Lulin One-meter telescope taken soon after the discovery of the activity.



The dust morphological simulation indicates a long-lasting cometary activity which was confirmed by the ZTF survey images in the early of this year. Below is a mosaic showing images of the comet taken by ZTF on 2021 February 10 with a composite integration time of 150 s in r-band.



We are still tracking this tiny object for characterizing the nature of the active event as long as it is now in the outbound orbit.”

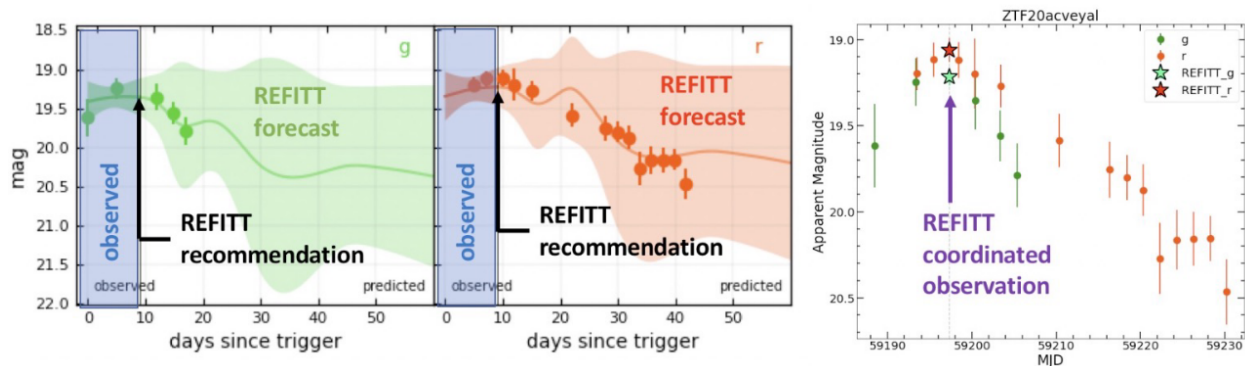
Cosmology with SNe Ia:

“The SNIa team is all about the collaboration meeting prep this week. From who’s going to talk, to ‘where are the results going to come from’, it’s all go, go, go! Cosmology-wise, get ready for talks about ‘the sample’: how we select it, how accurate are the redshifts, how good is the photometry, how do our results compare to everyone else, what did we actually find, and ‘when can we decide if the universe is getting bigger’?! For the physicists amongst us, the highlights are all around ‘the unique’: early excesses, late-time undulations, and potential twins. Tune in next week to hear lots about SNe: plenty of plots will be presented, questions a plenty will be asked, and maybe you might even be drawn into a collaboration or two ;). Looking forward to meeting everyone at last :).”

Physics of supernovae and relativistic explosions:

“The Bright Transient Survey group plans to publish forced photometry light curves for all SNe in their sample, and Adam has been working on obtaining high-quality light curves.

Ari developed the REFITT algorithm that uses machine learning to forecast SN light curves. It can moreover decide every day which SNe would benefit the most from photometric follow-up observations to achieve a certain science goal, such as SN classification or determining the time of peak.”



Reminders:

- PublicAlerts: There is a [link](#) to the alerts archive on the [website](#)!
- Please help us keep track of all the available softwares! A preliminary list is available on the [twiki](#). 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 [link](#)!
- If you want to get access to the **ZTF data** via the IRSA interface, please request data access to communication coordinator Ivona Kostadinova: ivonata@astro.caltech.edu
- 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://zwicki.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 Ivona Kostadinova at ivonata@astro.caltech.edu

"So long, and thanks for all the fish."

- Douglas Adams

Have a good and productive week!

Erik and Igor