

Newsletter #70, February 25th 2019

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

Press Release

Here are some of the press articles released as part of the Press Release. They are also listed in the "ZTF in the press" section of the Twiki.

- CNN (Don Lincoln): The instrument that spots killer asteroids and star-eating black holes
- GeekWire: Rapid-response telescope team shares greatest hits from ZTF sky scanner
- Axios: Something wondrous: The Andromeda galaxy
- CNN: 'Rare species' of asteroid spotted in our solar system
- CNN local articles at many places including:
 - o 'Rare species' of asteroid spotted inside Earth's orbit
- Gizmodo: <u>First Images from New Night-Sky Camera in California Show Gorgeous View of</u>
 Andromeda Galaxy
- Space.com: Found! Fastest-Orbiting Asteroid Zips Around Sun in Just 165 Days
- Geek.com: <u>Caltech's Cosmic Camera Captures 'Ned Stark,' 'Jon Snow' Shredding a Star</u>
- Sky and Telescope: New Astro Camera Spots Thousands of Celestial Flare-ups
- Cosmos: The Andromeda galaxy, as you've never seen it before
- Taiwanese news:
 - o https://www.ncu.edu.tw/campus/article/2231
 - o 2019-02-09 中時電子報 台灣參與國際天文觀測 發現近地小行星公轉周期僅165天
 - o 2019-02-09 Hinet新聞 台灣參與「ZTF」觀測 捕捉公轉週期迄今最短的近地小行星

Updates from GROWTH (by Ashot Bagdasaryan)

Updates for this week:

- i) A button called 'Avro Packets' under the 'Additional Info' section of the source page that shows all the avro packets of the source.
- ii) Users can now ingest targets into their scanning pages by using the target's ZTF name on the 'ingest_avro_id.cgi' page.
- iii) Users can now save targets directly to one of their science programs on the 'ingest_avro_id.cgi' page by including the field 'save=yes' in the URL or via a button available on that page after a target is ingested.
- iv) Redshift from the GLADE catalog has been added to sources' auto annotations.
- v) Cone search functionality, linked from the home page, now also searches for sources in Kowalski.

News from AMPEL

The AMPEL development repository is now much more mature and well documented. You can find it here. This contains notebooks based on which AMPEL units/channels can be developed and tested.

News from working groups

Machine Learning: "Zwickyverse has a set of objects from the Galactic plane that need labels.

Please volunteer. There have been steady classifications on Zooniverse. The first dataset is being analyzed

and samples being investigated for incorporation in training sets. We are starting to look at some interesting objects found by Zooniverse volunteers, stay tuned."

Solar System: "We may be in a weather break for the moment, but a trio of paper submissions is happening -- this week we submitted two papers describing the streak detection and the outburst of main-belt asteroid Gault this week, and a paper about the application of Deep Learning on streak detection (lead by the ML group) is currently with the Publication Board."

Cosmology with SNe Ia: "Continuous work towards finalizing a Yr 1 cosmology sample and to understand how to achieve a larger and more complete Yr2 sample"

Supernovae and relativistic explosions: "This week, the Supernovae and Relativistic Explosions group discussed the different proposals for changing observing strategies in Year 2 and how it will impact our science goals. We have also resumed daily scanning of the partnership stream for infant and rapidly evolving supernovae, and are hoping for clear and stable weather on Mt Palomar soon."

AGNs & TDEs: "The ZTFbh SWG has a couple papers very close to submission to the publication board...stay tuned...as well as two strong candidate TDEs awaiting spectroscopic confirmation and Swift UV observations. We are continuing to scan Sjoert's TDE ranking pages for triggering follow-up observations, and are very happy to have SEDM back online!"

<u>The papers corner:</u> Please remember to let us know if your paper was submitted/accepted. We will let the collaboration know here.

March collaboration meeting in Israel:

Please have a look at the up-to-date (almost final...) program here.

- If you're not listed and would like to give a talk please let us know ASAP, we may be able to find a slot.
- Please check your name and title (and verify the length of talk); let us know if needed to revise anything.
- On Tuesday around 17:00 we thought of having a "closed"/separate session (with beer & snacks) for only the students, as an opportunity to interact more closely and get to know each other better. During this session each student is encouraged to describe his study/main research topics in 180 sec (no presentation), as potential for additional discussion and Q&A among everyone.

We are thinking what the "elderly" can do in parallel, maybe a whisky/wine hour with either general or specific discussion items.

- Before the closing talk on Thursday, we propose to dedicate a session to discuss general ideas and future plans, maybe in the form of some panel.

If there is a more specific talk about methodologies/future plans that someone wants to propose, let us know

- Friday morning is dedicated to less formal workshop/tutoring sessions.

We still haven't finalised the sessions between ~10:45-12:00, so do let us know if there are specific topics you wish to discuss/lead.

- Also, please let us know if you plan to attend the Fri sessions.
- The Jerusalem trip on Fri afternoon will likely take place :-) (there are already >10 people interested). If you would like to join the trip and haven't written to us about it please let us know.

Reminder: IMPORTANT: We (still) need your help for the ZTF FAQs page! (and would love to remove this item from the newsletter)

During several weeks, we have listed the questions that people across the collaboration would like to have in the <u>FAQs</u>page. Now it is time to add answers. Please help us fill the voids (and elaborate on the answers already there).

More 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 GUInow 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

"Climate is what we expect. Weather is what we get" (Mark Twain)

Have a great and productive week!

Thomas and Maayane