

Newsletter #47, September 14th 2018

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

Twitter new policy

We are starting to tweet scientific publications and ATels more systematically.

- If you publish an **ATel** please send us a brief understandable summary (280 characters max) summarising what is interesting about the object (we will also link to the TNS when possible).
- Regarding **papers**, when sending it to the publication board, please attach a 280 characters summary of it which we can then tweet.

In both cases, think what a general astronomy enthusiast (or journalist following our stream) would like to know about your object/publication!

News from AMPEL

AMPEL is operating (currently running v0.4). Work with generating a clean stream of SN detentions to be distributed via TNS is ongoing. Sample selections can be found in daily incrementals on the #generalsn-ampel channel in the ZTF-general wiki. We are also implementing automatic SLACK notices for good candidates that are either nearby or well suited for follow-up facilities such as VLT and NTT.

News from working groups

Machine learning: "(1) ZTF MSIP Zooniverse project is now in beta. As we get feedback and questions, we encourage ZTF members to look at the "Talk" pages, and, if there are questions relevant to their expertise, please contribute. <u>https://www.zooniverse.org/projects/rswcit/ztf-public-msip-project/talk</u> The beta testers so far feel that it is a good project, but they do find it on the harder side and need more examples. (2) Reviews from PASP for the ML paper are back. They want us to shorten some sections, but otherwise no major changes needed. (3) The RB team will build the next version of the classifier as it continues to track down the discrepancy between cross-validation and test set performance. " SNe and relativistic explosions: "Our group was busy this week with an interesting transient! ZTF18abukavn is a rapidly evolving, luminous blue transient. In under 2 days the brightness increased by 4 mag. After this rapid rise, the light curve flattened (current luminosity r~-19.4). Initial spectroscopic observations revealed a blue and featureless spectrum. With time, broad absorption features started to emerge, which could be explained by H and HeII at an expansion velocity of ~0.1 c! The group has triggered follow observations from the X-rays to the radio to monitor this peculiar event. We issued two ATels about our observations (ATels #12030 and 12032)."

AGNs and TDEs: "The ZTFbh SWG has had an exciting week! Sjoert posted his paper on TDE NedStark on the arXiv, and we posted an ATel on TDE JonSnow. We had a clear night on DCT on Wednesday night and got some spectra of TDE, CLAGN, and recoiling BH candidates. We have some follow-up

spectra from SEDm, Keck, and P200 for our active TDEs, and are analyzing more HST, Swift, and XMM observations as they come in. "

Cosmology and SNe Ia: "We are continuously working on tools needed for our planned deeper spectroscopic run in October. Furthermore we are currently finishing up a paper predicting how many SNe we will find and comparing this to our first discoveries."

Reminder: Nightly summary of public alerts:

Thank you to Richard Walters, we now have a link on the public website (<u>https://www.ztf.caltech.edu</u>, bottom right) giving a summary of the public alerts and sky-coverage for the recent night. One can examine other nights by entering a night-date in UT.

<u>Reminder: IMPORTANT: We (still) need your help for the ZTF FAQs page! (and would love to</u> 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:

- Public Alerts: There is a link to the alerts archive on the website!

- 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 link!

- If you want to get access to the **ZTF data** via the IRSA interface, please request data access to the communication coordinators: <u>ztf.communication.coordinators@gmail.com</u>

-Archive GUI now ready! The interactive image search, filtering and visualization tool is now ready ().

- The **ZTF Twitter account** is now active! <u>https://twitter.com/ztfsurvey</u>. Re-tweet @ztfsurvey!

- To use the **url shortener** (e.g. during telecons, talks, in emails), navigate to <u>http://zwicky.tf/shorten</u> (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

"It takes discipline not to let social media [Twitter] steal your time" (Alexis Ohanian)

Have a great and productive week! Thomas and Maayane