

Newsletter #116, February 19th 2020

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

Presentations at the Spring 2020 ZTF collaboration meeting (Jakob, Anna and Marek):

The <u>spring 2020 collaboration meeting</u> will take place March 23-25 in Berlin, followed by the <u>real-time</u> <u>multi-messenger workshop</u> on March 26-27. Some notes:

- As usual, the ZTF WGs will be asked to present an overview of their results and outlook for the future.
- Please let us know before February 28 if you wish to present a topic in more detail, or have other program suggestions.
- We will try to accommodate remote participation. To make this as efficient as possible, it would be great if you could let us know already now which sessions you might want to connect for.

News from working groups

Solar System: "NEOZTF has had a bumper crop of NEOs! The following NEOs were discovered by NEOZTF in the past week: <u>2020 CF2</u>, <u>2020 CG2</u>, <u>2020 CQ2</u>, <u>2020 CW2</u>, with a fifth one to be announced."

AGNs and TDEs: "We are busy looking into the recent SRG/eROSITA ATels. Perhaps one of them is related to the large X-ray flares we have been seeing from CL AGN (e.g.,

http://www.astronomerstelegram.org/?read=13460)."

Multimessenger: "LIGO and Virgo detected a new binary neutron star merger last week, S200213t. The latest skymap available localized S200213t within an area of 2326 deg2 (90%) and placed it to a distance of (201+-80) Mpc. ZTF followed up this GW trigger and published several candidates via GCN circular. The most promising candidates were classified as unrelated SNe with spectroscopic follow-up, including Keck and P200 observations. Further follow-up of the remaining sources is on-going."

Physics of supernovae and relativistic explosions: "The focus of last week's telecon was primarily on Type Ia SNe. Adam Miller gave an update on ZTF19adcecwu – a Type Ia SN with a blue pre-bump. He aims to write a fast paper discussing the origin of pre-bump and the peculiarity of the main emission. For Ia SN-enthusiasts, the light curve of ZTF19adcecwu is similar 91bg-like SNe but the spectroscopically distinct from this sub-class. ZTF19adcecwu is also different in other aspects from most Type Ia SNe. Kate gave an update on how we can use infant Type Ia SNe to identify their progenitors and to pinpoint explosion channels. She aims to obtain spectra of Type Ia SNe shortly after the explosion. Anna reported

on the broad-lined Ic SN ZTF20aalxlis. The unusual feature about this event is the detection of thermal emission from the cooling photosphere after the shock break-out. This feature is only very short-lived. Up until now, it was only observed for GRB-SNe. Rapid Swift observations lead to the detection of X-ray photons. Anna submitted a DDT for Chandra and triggered VLA observations to study this Ic-BL SN in great detail."

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 they are published. They will be kept track of <u>here</u>.

Reminders:

- PublicAlerts: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: 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! <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 <u>http://zwicky.tf/wiki</u>. To request access, please email us at ZTF.communication.coordinators@gmail.com

"I think it is in collaboration that the nature of art is revealed"

Steve Lacy

Have a great and productive week! Igor and Erik