

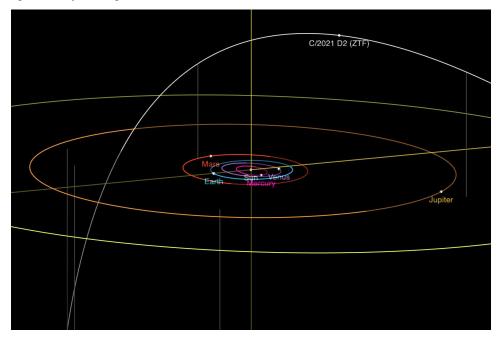
Newsletter #161 March 24th 2021

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

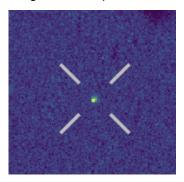
News from working groups

Solar System:

"The comet <u>C/2021 D2</u> was announced today following its initial discovery by ZTF in February 2021 in the morning Twilight survey. A diagram of the orbit has been attached here:



The comet has a very high inclination of 83 degrees, an eccentricity of ~1 and a perihelion distance of ~3 au. The comet will approach its perihelion in 2022 February. ZTF contains pre-discovery observations of the comet going as far back as at least 2020 August. A 150 s stack of r band ZTF images of the comet taken on 2021 March 9 is attached showing the development of a coma:



The comet currently has a heliocentric distance of ~4.7 au and is likely to brighten from its current magnitude of r~19 and its activity will increase due to the sublimation of volatiles on its surface as it nears the Sun."

AGNs and TDEs:

"The AGN & TDE meets every Wednesday from 11a-12n Pacific time. We review the candidates, prioritize candidates for follow up, discuss improvements to processing and end with a discussion of science and papers. A major focus of this group is collaboration with the Russian SRG team. Along with our Russian colleagues we have submitted proposals to NuSTAR and Chandra for late time follow up of TDEs and study of high redshift quasars. Yuhan Yao in her capacity as the TDE lead to the Gemini LPP proposal has been quite busy.

We have had a preliminary discussion with Matt Nicholl (University of Birmingham, UK) regarding possible collaboration of U-band observations of TDE candidates with the Liverpool Telescope. Separately, we have invited a young researcher from IKI, Moscow and a key member of the Russian SRG group to join our weekly WG meeting. We may change the meeting time from 11am Pacific to 9am Pacific to make it convenient for our (growing) European collaborators."

Cosmology with SNe Ia:

"Last week Young-Lo Kim talked about his recent work on the SEDm reduction pipeline and how to better reject cosmic rays. Nicolas Miranda also showed some work on using machine learning for photometric typing of SNe. In the upcoming meeting this wednesday, we will hear more about the ongoing calibration efforts (PSF modeling) from Mickael Rigault, and Jakob Nordin will talk about steps required for constructing a SN Ia cosmology sample."

Physics of supernovae and relativistic explosions:

"The SN working group would like to encourage sharing data (including spectra) with astronomers outside of the ZTF collaboration, of course only after approval from the working group heads and data owners and only if none of us is planning to work on the corresponding SN or topic. The aim is to make the best use of the collected observations and to be involved in papers that would otherwise be purely based on public ZTF observations. Jesper formulated a policy that ensures that such papers are reviewed within ZTF similar to our regular publications."

Reminders:

- PublicAlerts:There is a <u>link</u> to the alerts archive on the <u>website!</u>
- Please help us keep 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 communication coordinator Ivona Kostadinova: jvonata@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://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 Ivona Kostadinova at ivonata@astro.caltech.edu

"Facts are stubborn, but statistics are more pliable."

- Mark Twain

Have a good and productive week!

Erik and Igor