Contribution ID: **4**                                                    Type: **Talk**

# SNAD: enabling discovery in the era of big data

*Monday, November 27, 2023 4:45 PM (15 minutes)*

In the era of wide-field surveys and big data in astronomy, the SNAD team (https://snad.space) is exploiting the potential of modern datasets for discovery new, unforeseen, or rare astrophysical phenomena. The SNAD pipeline was built under the hypothesis that, although automatic learning algorithms have a crucial role to play in this task, the scientific discovery is only completely realized when such systems are designed to boost the impact of domain knowledge experts. Our key contributions include the development of the Coniferest Python library, which offers implementations of two adaptive learning algorithms with an "expert in loop", and the creation of the SNAD Transient Miner, facilitating the search for specific types of transients. We have also developed the SNAD Viewer, a web portal that provides a centralized view of individual objects from the Zwicky Transient Facility's (ZTF) data releases, making the analysis of candidates in anomalies more efficient. Finally, when applied to ZTF data, our approach has yielded over a hundred new supernova candidates, along with few other non-catalogued objects, such as red dwarf flares, active galactic nuclei, RS CVn type variables, and young stellar objects.

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**Session Classification:**  Contributed talks

**Track Classification:**  Paris