

# Anomaly Detection in Astronomical Data using Machine Learning

*Friday, 14 October 2022 11:00 (30 minutes)*

The next generation of telescopes such as the SKA and the Vera C. Rubin Observatory will produce enormous data sets, far too large for traditional analysis techniques. Machine learning has proven invaluable in handling large data volumes and automating many tasks traditionally done by human scientists. In this talk, I will discuss how machine learning for anomaly detection can help automate the process of locating unusual astronomical objects in large datasets thus enabling new cosmic discoveries. I will introduce Astronomy, a general purpose framework for anomaly detection in astronomical data using active learning and overview some recent results.

## Track

Analysis Techniques

**Primary author:** Dr LOCHNER, Michelle (University of the Western Cape/ South African Radio Astronomy Observatory)

**Presenter:** Dr LOCHNER, Michelle (University of the Western Cape/ South African Radio Astronomy Observatory)

**Session Classification:** Plenary 7