

**SIPo (Seminario de Investigadores Postdoctorales)**

**Speaker: Alejandra Muñoz Arancibia, CMM, U. de Chile.**

**Title: Hunting transient astrophysical events with the ALerCE community broker.**

**Summary:**

The Automatic Learning for the Rapid Classification of Events (ALerCE) is a Chilean-led astronomical alert broker, and one of the seven brokers selected to receive the full alert stream from the Rubin Observatory. Since 2019 ALerCE has been ingesting the public stream from the Zwicky Transient Facility, which contains hundreds of thousands of alerts per night, providing classifications and visualization for the astronomical objects detected.

In this talk I describe the ALerCE project and its different science cases, showing how it has enabled the follow-up and study of young supernovae and other transient events. I highlight some of our discoveries, plus unforeseen benefits that we have found throughout our search. The advent of new surveys that target the dynamic sky, like the ones conducted now by the Asteroid Terrestrial-impact Last Alert System and soon by Rubin, opens a promising future for continuing the collaborative exploration of the changing universe.

**Date:** 3th Jun 2024, Monday at 2.30PM (Note that starting next week, SIPo will take place on Mondays instead of Tuesdays)

**Venue:** Multimedia, sexto piso, torre norte de Beauchef 851.

