Contribution ID: **67** Type: **Oral Presentation**

O30 - Pasipo: An Interactive Sonification Platform for Astronomical Images

Tuesday, 24 November 2026 11:45 (15 minutes)

Over the years, digital sky surveys have produced extensive archives of astronomical images that are freely available to the public. However, astronomy remains heavily reliant on visual representations, limiting the participation of blind and low-vision individuals in citizen science and reducing opportunities to explore astronomical data through nonvisual means. To address this gap, the Balik Balatik initiative developed a web-based interactive sonification platform called "Pasipo" that translates two-dimensional astronomical images into sound, expanding the range of accessible astronomy resources available in the Philippines. The platform converts spatial and color information into real-time audio using JavaScript and the Tone.js Web Audio framework, allowing users to interactively explore astronomical images through auditory cues. We use astronomical images captured by the Las Cumbres Observatory as demonstration datasets. By providing an accessible alternative to visual image analysis, our platform demonstrates the potential of sonification as an accessible tool for astronomy education, public outreach, and citizen science.

Primary authors: Ms FULGENCIO, Bernadette (University of the Philippines Diliman); Mr GACUSAN, Prince Abraham (Institutional Shareholder Services Philippines Inc.); Mr OLOHOY, Michael Kent (De La Salle University); Mr PEÑA, Airone Gabriel

Presenters: Ms FULGENCIO, Bernadette (University of the Philippines Diliman); Mr GACUSAN, Prince Abraham (Institutional Shareholder Services Philippines Inc.)

Session Classification: Contributor Session

Track Classification: Accessibility, Diversity, Equity, and Inclusion in Astronomy Communication