

Contribution ID: 84 Type: Oral Presentation

## From setting up a new telescope to optimizing astrometric solutions.

Thursday, 7 July 2022 12:00 (15 minutes)

The physics building on the Potchefstroom campus has a new optical telescope on it. It is the old 30 cm that used to be at the Nooitgedacht observatory in 1998. We decided to give it a second life, obtained a new mount and refurbished it for public outreach purposes. This project was to setup a new telescope, from the roof anchoring to the electrical connection, to the balancing and polar alignment . Basically getting all parts, including software to function properly. We are now in the final phase of making this observatory ready for the public. When it comes to scientific observations, we have tested and optimized methods of plate solving for accurate astrometric solutions. I will discuss here how we go from detector coordinates (X,Y) to astronomical coordinates (RA, DEC) on images taken at the Nooitgedacht observatory.

## Apply to be considered for a student; award (Yes / No)?

Yes

Level for award; (Hons, MSc, PhD, N/A)?

MSc

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