



Contribution ID: 157

Type: **Poster Presentation**

Characterization of the spectral irradiance measurement setup

Wednesday, 5 July 2017 17:10 (1h 50m)

This presentation addresses sources of uncertainties in an ultraviolet (UV) spectroradiometry setup for measuring spectral irradiance. In UV spectroradiometry, spectral irradiance measurements have high uncertainties mainly due to a low signal-to-noise ratio (SNR) in the UV region; however other factors may also contribute to high uncertainties. Therefore determining the sources of uncertainties is important to improve the accuracy of the measured results. We perform characterization of the UV spectroradiometric setup to quantify certain sources of uncertainty in measurement associated with this setup. These include positioning and alignment of sources, scattered light, and the system temperature dependence.

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

yes

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

MSc

Main supervisor (name and email) and his / her institution

Walter Meyer
 wmeyer@up.ac.za
 University of Pretoria
 Private bag X20
 Hartfield
 0028

Would you like to submit a short paper for the Conference Proceedings (Yes / No)?

yes

Primary author: Mr MKABELA, Macdufe (National Metrology Institution of South Africa)

Co-authors: Mr DU TOIT, Pieter (NMISA); Mr SIEBERHAGEN, Rheinhardt (NMISA)

Presenter: Mr MKABELA, Macdufe (National Metrology Institution of South Africa)

Session Classification: Poster Session 2

Track Classification: Track C - Photonics