



24th Australian Institute of Physics Congress *AIP: Relativity and Gravitation* 

# **Monday 12 December**

11:00

# AIP: Relativity and Gravitation: ASGRG 1

Session | Location: Adelaide Convention Centre, Room R2 | Convener: Dr Karelle Siellez

### 11:00-11:15

Seismic-isolation-chain displacement sensing using Digital Interferometry

#### Speaker

Ya Zhang

### 11:15-11:30

The Optical Limit of Phase Measurement in Space Based Interferometry

#### Speaker

Callum Sambridge

### 11:30-11:45

Enhanced laser noise suppression for LISA using arm and cavity locking

#### Speaker

Mr Jobin Valliyakalayil

### 11:45-12:00

Characterization of laser offset phase locking for a Newtonian noise sensor

### Speaker

Sheon Chua

# 12:00-12:15

Tolerance of Hartmann Wavefront Sensors to third-order optical aberrations in the projecting telescopes

### Speaker

**Madison Simmonds** 

### 12:15-12:30

The latest development in ALFRA, the UWA low-frequency rotational accelerometer

#### Speaker

Carl Blair

12:30 14:00

### AIP: Relativity and Gravitation: ASGRG 2

Session | Location: Adelaide Convention Centre, Room R2 | Convener: Krzysztof Bolejko

# 14:00-14:15

The cautious tale of GW200129: mimicking binary black-hole spin-precession with detector noise

### Speaker

Mr Ethan Payne

### 14:15-14:30

Black holes, white holes, wormholes: their geometry and physics

### Speaker

Daniel Terno

14:30-14:45 Horizon Singularities and Energy Momentum Tensor Classification

Speaker
Ioannis Soranidis

14:45-15:00 Continuous Gravitational Waves from Young Neutron Stars

Speaker
Ben Grace

15:00-15:15 Space-Time Inside a Star

Speaker
Samuel Drake

15:15-15:30 Quantum signatures of a mass-superposed black hole

Speaker
Joshua Foo

15:30