### **Session Program**

7-11 Apr 2025

# Tales of Gravity

# Flash talks

University of Nottingham, Keighton Auditorium University Park Campus Nottingham NG7 2RD

### Monday 7 April

Flash talks	5
Session	rity of Nottingham Keighten Auditorium University Dark Compus Nottingham NC7 200
Convener: Davi	d Stefanyszyn
14:40-14:48	
The search	for modified gravity signatures within early and late time cosmologica
data	
Speaker	
Enrico Specogn	a
14.49 14.56	Weak Gravity from Horndeski Theories
14.40-14.50	weak Gravity from Horndeski meones
Speaker	
Linus Thummei	
14:56-15:04	Deciphering Coupled Scalar Dark Sectors
Speaker	
Saba Rahimy	
15:04-15:12	
Understand	ing acoustic scale observations: the one-sided fight against \$
\Lambda\$	
Speaker	
Ewan Chamber	ain
15,12 15,20	Ravesian Ontimisation for Ravesian Evidence
15.12-15:20	bayesian optimisation for bayesian evidence
Speaker	
Ameek Malhotr	

### Wednesday 9 April

#### 16:50

### Flash talks

Location: University of Nottingham, Keighton Auditorium, University Park Campus Nottingham NG7 2RD | Convener: Chair: Miguel Bezares

#### 16:50-16:52

## Post-Newtonian gravitational waveforms in scalar-tensor theories: elliptic and hyperbolic orbits

#### Speaker

David Trestini

#### 16:52-16:54

#### Outlook for the detection of higher gravitational wave memory effects

**Speaker** Alexander Grant

### 16:54-16:56 Simulating neutron stars with dissipative hydrodynamics

#### Speaker

Lik Hang Harry Shum

#### 16:56-16:58

#### Probing Graviton Mass Through Strong Lensed Gravitational Waves with Next-Generation Detectors

#### Speaker

Shuaibo Geng

#### 16:58-17:00

Penrose and super-Penrose energy extraction from a Reissner-Nordström black hole spacetime with a cosmological constant through the Bañados-Silk-West mechanism

Speaker

Duarte Feiteira

#### 17:00-17:02

#### Screening mechanisms in scalar-tensor theories from a particle perspective

Speaker

Sergio Sevillano

#### 17:02-17:04 Extremal Black Branes from the Near-Horizon

#### Speaker

Calvin Chen

#### 17:04-17:06 Gravitational Fixed Point for a Standard Model like Theory

Speaker

Vatsalya Vaibhav

17:06-17:08 Quasinormal modes in semi-open systems

**Speaker** Leonardo Solidoro

#### 17:08-17:10

# Fix the Frame, Resolve the Memory: the Bondi--Sachs gauge in Black Hole Perturbation Theory

#### Speaker

Andrew Spiers

#### 17:10-17:12 A new look at multi-gravity and dimensional deconstruction

#### Speaker

Speaker

Mr Flavio Sanchez

Kieran Wood

#### 17:12-17:14 Probing Gravity Through Light Bending

17:30

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