## 50 Years of Horndeski Gravity: Exploring Modified Gravity

# Monday, July 15, 2024

#### Contributed Talks: Contributed Talks (Session 1) - Federation Hall (3:45 p.m. - 5:00 p.m.)

time	[id] title	presenter
3:45 p.m.	[18] Photon Rings and Shadow Size for General Axi-Symmetric and Stationary Integrable spacetimes	SALEHI, Kiana
4:00 p.m.	[85] Modified gravity getting to the one-point clustering statistics	UHLEMANN, Cora
4:15 p.m.	[22] Generalized disformal Horndeski theories: consistency of matter coupling and cosmological perturbations	Dr TAKAHASHI, Kazufumi
4:30 p.m.	[86] Quantum Energy Conditions and Bouncing Cosmologies	HULL, Brayden
4:45 p.m.	[4] Spontaneous scalarization in scalar-Gauss-Bonnet gravity and beyond	Prof. YAZADJIEV, Stoytcho

## **Tuesday, July 16, 2024**

### Contributed Talks: Contributed Talks (Session 2) - Federation Hall (2:15 p.m. - 3:30 p.m.)

time	[id] title	presenter
2:15 p.m.	[40] Constructing rotating black holes in Horndeski gravity	BEN ACHOUR, Jibril
2:30 p.m.	[87] Assessing observational constraints on dark energy	SHLIVKO, David
2:45 p.m.	[10] Quasinormal modes and non-linear behaviour	MAY, Taillte
3:00 p.m.	[15] Non-linear gravitational waves in Horndeski gravity	Dr ROUSSILLE, Hugo
3:15 p.m.	[83] Formulating the complete initial boundary value problem in numerical relativity to model black hole echoes	DAILEY, Conner

## Wednesday, July 17, 2024

### Contributed Talks: Contributed Talks (Session 3) - Pl/1-100 - Theatre (2:15 p.m. - 3:30 p.m.)

time	[id] title	presenter
2:15 p.m.	[5] Constraining modified gravity models using galaxy cluster masses	Ms BUTT, Minahil Adil
2:30 p.m.	[21] mochi_class: A tool to streamline cosmological analyses of Horndeski's gravity	Dr CATANEO, Matteo
2:45 p.m.	[29] Testing gravity with the Dark Energy Survey	MUIR, Jessica
3:00 p.m.	[13] A Cosmic Glitch in Gravity	Mr WEN, Yunfei
3:15 p.m.	[36] Cosmological implications from DESI Y1 BAO and Future Forecasts	ZHANG, Hanyu

## **Thursday, July 18, 2024**

### Contributed Talks: Contributed Talks (Session 4) - Federation Hall (2:15 p.m. - 3:30 p.m.)

time	[id] title	presenter
2:15 p.m.	[31] Bouncing cosmology; a solution to the singularity problem and more.	Mr DEHGHANIZADEH, Amirhossein
2:30 p.m.	[34] Gauss-Bonnet Gravity in 4D and the connection to Horndeski's Theory	Dr FERNANDES, Pedro
2:45 p.m.	[8] How to study modified gravity as a particle theory and not collapse in the process	Dr SEVILLANO, Sergio
3:00 p.m.	[19] Scattering amplitudes in high-energy limit of projectable Horava gravity	RADKOVSKI, Jury
3:15 p.m.	[46] Theoretical status of Horava gravity	SIBIRYAKOV, Sergey