

**Session Program**

**Jun 15 - 17, 2023**

**Theory Canada 15**

***Relativity, Gravitation and Cosmology***

Mount Allison University, Dunn 113  
67 York St., Sackville, New Brunswick

## Sat, June 17

9:00 AM

### Relativity, Gravitation and Cosmology

**Session** | **Location:** Mount Allison University, Dunn 113, 67 York St., Sackville, New Brunswick | **Convener:** Hubert de Guise

09:00 - 09:30

#### Indeterminacy in Classical Cosmology with Dark Matter

**Speaker**

Viqar Husain

09:30 - 10:00

#### Exotic Marginally Outer Trapped Surfaces are Unstable

**Speaker**

Ivan Booth

10:00 - 10:30

#### Negative Mass in the Universe is Relative, Repulsive and Real

**Speaker**

Prof. Manu Paranjape

10:30 AM

11:00 AM

### Relativity, Gravitation and Cosmology

**Session** | **Location:** Mount Allison University, Dunn 113, 67 York St., Sackville, New Brunswick | **Convener:** Hubert de Guise

11:00 - 11:30

#### Tentative evidence for cosmological coupling of black holes and implications for dark energy

**Speaker**

Valerio Faraoni

11:30 - 12:00

#### BPS Gravitational Solitons in Anti-de Sitter Spacetimes

**Speaker**

Turkuler Durgut

12:00 - 12:30

#### A five dimensional distorted black hole with a "bubble".

**Speaker**

Matin Tavayef

12:30 PM

2:00 PM

### Relativity, Gravitation and Cosmology

**Session** | **Location:** Mount Allison University, Dunn 113, 67 York St., Sackville, New Brunswick

14:00 - 14:30

#### Conservation, Non-conservation Laws and Gravitational Energy momentum in Curved Spacetime

**Speaker**

Prof. Zhao Yan Wu

2:30 PM