Contribution ID: **84** Type: **Talk/Seminar**

Searching for non-Riemannian signatures in cosmological data

Thursday, 26 September 2019 14:00 (30 minutes)

The Einstein's theory of gravity, General Relativity was build on the theory of Special Relativity. This generalisation required utilising the full generality of the Riemannian geometry. Many of the present-day cosmological tests of GR are still based on the assumption of the Riemannian geometry. However, in order to fully study and test various extensions of GR one is also required to move beyond the Riemannian geometry. In my talk I will focuses on light propagation and discuss what signatures in cosmological observational data could point to non-Riemannian effects. This talk will not be a comprehensive review of the issue - it will only focus on the distance and redshift relations. I will discuss observational constraints and talk how future surveys could provide a better insight into the underlying geometry of our Universe.

Primary author: Dr BOLEJKO, Krzysztof (University of Tasmania)

Presenter: Dr BOLEJKO, Krzysztof (University of Tasmania)

Session Classification: Selected Talks

Track Classification: Selected Talks