

16 May 2018 – RTG Colloquium Oldenburg



Sourabh Nampalliwar (Uni Tübingen)

Testing Einstein's gravity with X-rays

Abstract

Einstein's theory of gravity is the prevailing theory to describe the gravitational effects in our universe. Tests of Einstein's theory in the strong gravity regions of our universe is fast becoming an important paradigm in physics. X-ray reflection spectroscopy of energetic black holes is a promising technique for testing Einstein's theory. In this context, I will describe the framework we have developed for analyzing the nature of black holes with X-ray reflection spectroscopy. I will discuss the capabilities of current instruments and illustrate the significant progress expected in near future.