Special FIAS Colloquium

Monday, September 14, 2015, 14:30
FIAS, Ruth-Moufang-Str. 1, 60438 Frankfurt
Lecture hall 100

Speaker: Prof. Dr. Tanu Padmanabhan, Inter-University Centre for Astronomy and Astrophysics IUCAA, Pune, India

Title: Gravity and the Cosmos

Spectacular progress in cosmology during recent years has allowed us to understand the evolution of our universe from a tiny fraction of a second after the Big Bang, till today, a span of about 14 billion years. This development has also highlighted some deep mysteries about the cosmos, especially regarding its composition, which is dominated by the energy density due to (what is called) the cosmological constant. Understanding the nature and numerical value of the cosmological constant is a major challenge in theoretical physics. I will describe our current understanding of the universe, emphasizing some recent work which has the potential to solve the enigma of the cosmological constant.