SCMS Seminar



ASYMPTOTICALLY HYPERBOLIC EINSTEIN MANIFOLDS AND SCATTERING THEORY

Dr. Fang Wang Shanghai Jiaotong University

Lecture

Time: 1:30-2:30 pm., Friday, November 17, 2017

Venue: Room 2001, East Main Guanghua Tower, Handan Campus

Abstract: In this talk, I will mainly introduce the scattering theory for asymptomatically hyperbolic Einstein manifolds. As a continuation of Guillarmou-Qing's work, we will mainly show the positivity of those scattering operators of order between 2 and 4 by assuming certain geometric conditions on the conformal innity. We also give an application of the positivity result to the quotient case to compute the Hausdorff dimension of the limit set. At last, a complex version of the story, the scattering theory for asymptomatically complex hyperbolic Einstein manifolds and its positivity results, will also be given.