Department of Mathematics
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Joint Geometric Analysis Seminar

(Part of MIST program)

The uniqueness of static metric extensions in general relativity

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Abstract

The static metric extension problem is a research program in geometric analysis that has seen considerable progress in recent years. Roughly speaking, the problem is to show the existence of a unique asymptotically flat static space with prescribed boundary metric and mean curvature. There has been a recent breakthrough on the existence of static extensions, but the uniqueness aspect is currently not well-understood. In this talk, I will discuss the motivation behind the static metric extension problem and explain our recent result on static extension uniqueness for Schwarzschild Bartnik data. This is joint work with Ye-Kai Wang

Date: 21 March 2024 (Thursday)
Time: 10:30 am-11:30 am
Venue: AB1 501a

All are Welcome