SCMS Seminar



CONTRACTIBLE 3-MANIFOLD AND POSITIVE

SCALAR CURVATURE

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Time: 15:00-16:00, Tue, July 30, 2019

Venue: Room 102, SCMS, Jiangwan Campus

Abstract: It is not known whether a contractible 3-manifold admits a complete metric of positive scalar curvature. For example, the Whitehead manifold is a contractible 3-manifold but not homeomorphic to R^{3} . In this talk, I will present my proof that the Whitehead manifold does not have a complete metric with positive scalar curvature. I will further explain that a contractible genus one 3-manifold, a notion introduced by McMillan, does not admit a complete metric of positive scalar curvature.