

NORMAL SCALAR CURVATURE INEQUALITY ON A CLASS OF AUSTERE SUBMANIFOLDS

Speaker: Jianquan Ge
Beijing Normal University

Time: Sat, Nov 23th, 10:30 - 11:30

Venue: Room 102, SCMS

Abstract:

In this talk, we introduce our recent joint work with Ya Tao and Yi Zhou. We establish new normal scalar curvature inequalities on a class of austere submanifolds by proving sharper DDVV-type inequalities on associated austere subspaces. We also provide some examples of austere submanifolds in this class and point out one of them achieves the equality in our normal scalar curvature inequality everywhere. As a byproduct, we obtain a Simons-type gap theorem for closed austere submanifolds in unit spheres which belong to that class.