

## **CALABI-YAU TYPE THEOREM FOR MANIFOLDS WITH NONNEGATIVE SCALAR CURVATURE**

**Speaker: Jintian Zhu**  
**Westlake University**

**Time: Thur, Mar. 28th, 10:30 - 11:30**

**Venue: Room 102, SCMS**

**Abstract:** In this talk, we show how to generalize the Calabi-Yau theorem for manifolds with nonnegative Ricci curvature to those with nonnegative scalar curvature, under extra but natural topological assumptions. We will first review the Calabi-Yau theorem and provide an alternative proof without using the volume-comparison theorem. Then we generalize this proof to nonnegative scalar curvature manifolds by establishing certain splitting results.