SCMS Seminar

ON THE UNIQUENESS OF SMOOTH STRUCTURES ON SPHERES

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Time: 13:30-15:00 pm., Friday, December 30, 2016

Venue: Room 2201, East Main Guanghua Tower, Handan Campus

Abstract: In this talk, I will discuss smooth structures on spheres and their relation to stable homotopy groups of spheres. I will talk about recent result with Guozhen Wang that the 61-sphere has a unique smooth structure. Following results of Kervaire-Milnor, Browder, Hill-Hopkins-Ravenel, we show that S1, S3, S5 and S61 are the only odd dimensional spheres that has a unique smooth structure. The proofs are computations of stable homotopy groups of spheres.