Boğaziçi MATH GRAD SEMINAR

Three Dimensional Contact Manifolds

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Abstract:

Contact distributions are natural geometric structures on manifolds, whose investigation originated from classical mechanics. We'll focus on three dimensional contact manifolds, and introduce elementary concepts in contact geometry, such as Reeb flows, characteristic foliations, convex surfaces. If time permits, we'll discuss Bennequin's theorem regarding the tightness of the standard contact structure on the three sphere.

Date : Monday, March 6, 2023 **Time**: 13:00 **Place**: TB130