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Título:

Mean equicontinuity and mean sensitivity

Abstract:

We shall consider a weak form of the notion of equicontinuity in topological dynamics, which called mean equicontinuity.

By some intensive study of the structure of the equicontinuous system, we solved an open problem of Scarpellini: for a mean equicontinuous system, any ergodic measure on it has the discrete spectrum. We also consider a local version of mean equicontinuity, which is called almost mean eqicontinuous, we can see this local property is quite different from the corresponding global one. We show that an almost mean eqicontinuous can have positive entropy, while an equicontinuous system is always of topological entropy zero. We also consider the notion of sensitivity in the mean sense, and get a dichotomy results: a transitive system is almost mean equicontinuous or mean sensitive and a minimal system is mean equicontinuous or mean sensitive. We also discuss some properties of above notions in the Banach mean sense.

This is a joint work with Jian Li and Xiangdong Ye.

Lunes 05 de Enero del 2015 a las 16:00 hrs, Sala de Seminarios Jacques L- Lions CMM, séptimo Piso, Beauchef 851, Torre Norte.

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