



**DIVERSITIES, *MILD* HYPERCONVEXITY
AND FIXED POINTS**

Rafa Espínola

University of Seville, Spain

espinola@us.es

Diversity is a recently introduced concept by D. Bryant and P. Tupper (2012) with reminiscences from phylogenetic theory which brings a new concept of generalized metric space. Very little is known yet about diversities apart from the fact that they exhibit a parallel behavior to metric spaces regarding the existence of tight spans (in other words, hyperconvex hulls). This allows to establish natural connections between metric hyperconvex spaces and hyperconvex diversities. In this talk we will expose a short introduction to diversities and study the problem of existence of fixed points for hyperconvex diversities. Positive and negative answers will be given at the time that a number of natural open problems will be proposed.

This talk is based on a joint work with Bożena Piątek.