"LION-MAN" AND THE FIXED POINT PROPERTY

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This talk focuses on the relation between the fixed point property for continuous mappings and a discrete lion and man game played in a strongly convex domain. Our main result states that in locally compact geodesic spaces, the compactness of the domain is equivalent to its fixed point property, as well as to the success of the lion. The common link among these properties involves the existence of different type of rays, which we also discuss.

This talk is based on a joint work with Adriana Nicolae (University of Seville) and Bożena Piątek (Silesian University of Technology).