
BRUNO STAFFA, University of Toronto

Generic density of geodesic nets

Let (M^n, g) , $n \geq 2$ be a Riemannian manifold and let Γ be a weighted multigraph. Stationary geodesic nets are embeddings $f : \Gamma \rightarrow (M^n, g)$ which are stationary with respect to the length functional induced by the metric g . They arise from Almgren-Pitts Morse theory on the space of 1-cycles $\mathcal{Z}_1(M, g)$ on (M, g) . During the talk, we will discuss the following result: for a Baire-generic set of Riemannian metrics on a fixed closed manifold M^n , the union of all stationary geodesic nets is dense in M . This is a joint work with Yevgeny Liokumovich.