About maximal distance minimizers. What is it and why they are so good?*

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on joint works with D. Cherkashin, A. Gordeev and others

Consider a compact $M \subset \mathbb{R}^d$ and l > 0. A maximal distance minimizer problem is to find a connected compact set Σ of the length (one-dimensional Hausdorff measure \mathcal{H}) at most l that minimizes

 $\max_{y \in M} \operatorname{dist}(y, \Sigma),$

where dist stands for the Euclidean distance. We give a survey on the results on the maximal distance minimizers: about the explicit examples and regularity of its local behaviour.



 $^{^{\}ast} {\rm and}$ how to expel rats from Paris