

LOCALIZATION AND ISOPERIMETRIC INEQUALITIES

Shin-ichi Ohta

Osaka University and RIKEN

The localization (a.k.a. needle decomposition) is a powerful technique reducing an inequality on a high-dimensional space to its one-dimensional counterpart on geodesics. Recently the localization was generalized to Riemannian manifolds as well as metric measure spaces, and applied to analyze various geometric and analytic inequalities. In this talk, we focus on isoperimetric inequalities, and discuss also their rigidity and stability if time permits.