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Joint Geometric Analysis Seminar

(Part of MIST program)

Existence of minimal hypersurfaces with arbitrarily large area
Dr. Ao Sun
University of Chicago

Abstract

I will present an approach to find minimal hypersurfaces with arbitrarily large area in a closed manifold with dimension between 3 and 7. The method is based on the novel Almgren-Pitts min-max theory, and its further development by Marques-Neves, Song and Zhou. Among the applications, we can show that there exist minimal hypersurfaces with arbitrarily large area in an analytic manifold. In the case where this approach does not work, it is surprising that the space of minimal hypersurfaces has a Cantor set fractal structure. This is joint work with James Stevens (UChicago).

Date: 19 January 2022 (Wednesday)
Time: 10:00am – 11:00am (Hong Kong time)
ZOOM link: https://cuhk.zoom.us/j/91805734715

All are Welcome