GEOMETRIC ANALYSIS SEMINAR

"Regularity theory for 2-dimensional almost area minimizing currents"

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Abstract: Building upon the Almgren's big regularity paper, Chang proved in the eighties that the singularities of area-minimizing integral 2-dimensional currents are isolated. His proof relies on a suitable improvement of Almgren's center manifold together with an asymptotic analysis of the frequency function. In a joint works with Camillo De Lellis and Emanuele Spadaro we give a complete proof of the existence of the center manifold, only sketched by Chang, and extend his theorem to two classes of currents which are "almost area minimizing", namely spherical cross sections of area-minimizing 3-dimensional cones and semicalibrated currents.

Wednesday, December 7th, 2016 MIT, Room 4-153 Time: 4:00 PM

