Department of Mathematics

The Institute of Mathematical Sciences

The Chinese University of Hong Kong

數學系

數學科學研究所

香港中文大學

Phone: (852) 3943 7988 • Fax: (852) 2603 5154 • Email: dept@math.cuhk.edu.hk (Math. Dept.)
Room 220, Lady Shaw Building, The Chinese University of Hong Kong, Shatin, N.T., Hong Kong

Joint Geometric Analysis Seminar

(Part of MIST program)

Minimal Hypersurfaces: Bubble Convergence and Index

Dr. Myles Workman
University College London

Abstract

The regularity theories of Schoen--Simon--Yau and Schoen--Simon for stable minimal hypersurfaces are foundational in geometric analysis. Using this regularity theory, in low dimensions, Chodosh--Ketover--Maximo and Buzano--Sharp studied singularity formation in sequences of minimal hypersurfaces through a bubble analysis.

I will review this background, before talking about my recent work in this bubble analysis theory. In particular I will show how to obtain upper semicontinuity of index plus nullity along a bubble converging sequence of minimal hypersurfaces.

Date:	January 26, 2024 (Friday)
Time:	5:00pm-6:00pm (Hong Kong time)
ZOOM link:	https://cuhk.zoom.us/j/91805734715

All are Welcome