

Alex Waldron (U Wisconsin):

Strict type-II blowup in harmonic map flow

Finite-time singularities are common in 2D harmonic map flow and very ill-behaved in general. However, Topping conjectured that for real-analytic target manifolds, the body map at a singular time will have only removable discontinuities. I'll discuss recent work related to this conjecture: We prove continuity of the body map when the target is $\mathbb{C}P^n$ and only (anti-)holomorphic bubbles appear, or under the assumption that the blowup is "strictly type-II." Time permitting, I'll also discuss current avenues.