

CHRISTINE BREINER
(FORDHAM UNIVERSITY)

Compactness theory for harmonic maps into metric spaces

We consider harmonic maps from a compact Riemann surface to a metric space with upper curvature bounds in the sense of Alexandrov. For a sequence of harmonic maps with uniform energy bounds, we determine the full “bubble tree picture” which includes energy quantization and a no-neck property. This result is analogous to Parker’s compactness theory in the smooth setting, though the proof is necessarily quite different. This work is joint with Sajjad Lakzian.