



Speaker: Andrea Malchiodi
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Thursday, May 4, 2017

2:00 PM

258 Hurley Hall

Title: On the Sobolev quotient in CR geometry

Abstract:

We consider a class of three-dimensional CR manifolds which are modeled on the Heisenberg group. We prove positivity of the mass under the condition that the Webster curvature is positive and that the manifold is embeddable. We apply this result to the CR Yamabe problem, and we discuss the properties of Sobolev-type quotients, giving some counterexamples for Rossi spheres. This is joint work with J.H.Cheng and P.Yang.