

1123-51-373

Hao Fang* (hao-fang@uiowa.edu), 14 McLean Hall, Iowa City, IA 52245. *Curvature Pinching and Gromov Volume of conic 2-spheres*. Preliminary report.

In this talk we discuss some results on the geometry of conic 2-spheres. Super-critical conic 2-spheres, in the sense of Troyanov, are examples of unstable Kahler manifolds, which do not have a constant curvature metric. Thus, it is interesting to understand their curvature properties. We will discuss the best curvature pinching properties and the best volume bound with a uniform curvature bound. We will also explore similar problems for higher dimensional examples. This is joint work with Mijia Lai. (Received August 30, 2016)