

1084-53-106

Ioana Suvaina*, 1326 Stevenson Center, Vanderbilt University, Nashville, TN 37240. *ALE Ricci-flat Kähler surfaces and weighted projective spaces.*

I will give an explicit classification of the ALE Ricci flat Kähler surfaces, generalizing previous classification results of Kronheimer. These manifolds are related to a special class of deformations of quotient singularities of type \mathbb{C}^2/G , with G a finite subgroup of $U(2)$.

I finish the talk by explaining the relations with the Tian-Yau construction of complete Ricci flat Kähler manifolds. (Received August 26, 2012)