

Resumo ALGA

Title: On rank 3 instanton bundles on projective 3 space

Abstract: We investigate rank 3 instanton bundles on P^3 of charge n and its correspondence with rational curves of degree $n + 3$. In order to prove that the generic stable rank 3 't Hooft bundle of charge n is a smooth point in the moduli space of rank 3 vector bundles of Chern classes $(0, n, 0)$. Additionally, for $n = 2$ we present a correspondence between stable rank 3 instanton bundles and stable rank 2 reflexive linear sheaves and we prove that the moduli space of rank 3 stable locally free sheaves on P^3 of Chern classes $(0, 2, 0)$ is irreducible, generically smooth of dimension 16.

Joint work with D. R. SANTIAGO, D. D. SILVA, AND L. S. SOBRAL