

11th ALGA Meeting

Maresias, São Paulo, from 10/16 to 10/22.

Speaker: Abdelmoubine Amar Henni (UNICAMP, Brazil)

Title: Smoothness of the Moduli space of mathematical instanton bundles of trivial splitting type on P^3

Abstract: (part of a joint work with Marcos Jardim and Renato Vidal Martins) We describe mathematical instantons of trivial splitting type on P^3 in terms of linear monad and in particular we describe the obstruction for the smoothness of the moduli space of such objects. Moreover, by using restrictions to any hyperplane in P^3 passing through a fixed line, we prove that the obstruction vanishes. In particular this gives a positive answer for the smoothness of the moduli space of rank 2 mathematical instantons on P^3 , conjectured many years ago.