

Portugal, June 2015

The title is :

Generalized Killing Spinors on Riemannian Spin^c Manifolds

Abstract:

In a joint work with Nadine Große, we extend the study of generalized Killing spinors on Riemannian Spin^c manifolds started by Moroianu and Herzlich to complex Killing functions. We prove that such spinor fields are always real Spin^c Killing spinors or imaginary generalized Spin^c Killing spinors, providing that the dimension of the manifold is greater or equal to 4. Moreover, we classify Riemannian Spin^c manifolds carrying imaginary and imaginary generalized Killing spinors.