

THE STATE UNIVERSITY OF NEW JERSEY

RUTGERS

Campus at Camden

Department of Mathematical Sciences

A Day for Complex Analysis and Geometry

May 3, 2013

- 11:00

Speaker Raphael Herrera, Universidad de Guanajuato, Mexico

Title Some remarks on spinors and geometry

Abstract A presentation of some new uses of spinors to describe geometric structures such as complex structures, CR-structures and Riemannian special holonomy.

- 12:30

Speaker Sorin Dragomir, Università degli Studi della Basilicata, Italy

Title An introduction to CR geometry and subelliptic harmonic maps

Abstract Topics include the Tanaka-Webster connection, Fefferman metric and J. Jost and C-J. Xu's subelliptic harmonic maps, an interpretation of which is given in terms of Lorentzian geometry.

- 3:30

Speaker Sorin Dragomir

Title Boundary Values of Bergman-Harmonic Maps

Abstract A discussion of boundary values of Bergman-harmonic maps leading to another geometric interpretation of subelliptic harmonic maps. This is done by relating the Kählerian geometry of the interior of a domain to the contact geometry of its boundary. The Graham-Lee connection is used to derive the compatibility equations on $\partial\Omega$ satisfied by the boundary values of a Bergman-harmonic.

The talks are in BSB 108.

For directions, parking permits, or further information, please contact Howard Jacobowitz at jacobowi@camden.rutgers.edu.