大阪市立大学数学研究所 微分幾何学セミナー Osaka City University Advanced Mathematical Institute OCAMI One Day Meeting on Differential Geometry

Date: August 30 (Monday), 2010

Place: Room 3040, 3rd floor, Building of Faculty of Science, Osaka City University.

Program :

10:40-12:10

Speaker : Professor Jürgen Berndt (King's College London, UK)

Title: Hypersurfaces in Symmetric Spaces

Abstract: In this talk I will present a survey about some solved and unsolved problems related to hypersurfaces in symmetric spaces. Particular emphasis will be on homogeneous hypersurfaces, and hypersurfaces with constant principal curvatures or with some other geometric properties. Much of this is related to ongoing joint work with Jose Carlos Diaz Ramos, Young Jin Suh and Hiroshi Tamaru.

13:30-14:30

Speaker : Dr. Nobutaka Boumuki (OCAMI)

Title: Reflective Submanifolds of Affine Symmetric Spaces

Abstract: In this talk I will determine reflective submanifolds of simple affine symmetric spaces G/H; and in addition, I will clarify relation between simple pseudo-Hermitian symmetric spaces G/R and simple para-Hermitian symmetric spaces G/U, in terms of Lagrangian reflective submanifolds (i.e., real forms) of G/R and para-complex reflective submanifolds of G/U.

15:00-16:30

Speaker : Professor Owen Dearricott (U. California Riverside, USA) Title : Positive curvature on 3-Sasakian 7-manifolds

Abstract : The few manifolds of positive sectional curvature known arise as the orbit spaces of free isometric actions on Lie groups. We discuss a very different sort of metric of positive curvature that arises on 3-Sasakian 7-manifolds and a new manifold of positive sectional curvature that arises in this way. This example is deeply connected to curvature operators on self-dual Einstein orbifolds and conformal geometry in dimension 4.

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