Università degli Studi della Basilicata
Dipartimento di Matematica, Informatica ed Economia

Seminario Interdisciplinare di Matematica

Si avvisano gli interessati che ***Venerdì 12 Settembre 2014 alle ore 16*** nell'Aula Seminari del Dipartimento (Aula n. 18), il

Professor Hajime URAKAWA
(Tohoku University)

terrà la conferenza dal titolo

CR geometry, pseudo harmonic maps and pseudo biharmonic maps

Summary. We first introduce pseudo harmonic maps and pseudo biharmonic maps given recently by Sorin Dragomir and Stefano Montaldo. Then, we raise the CR analogue of the generalized B.-Y. Chen's conjecture: "Every pseudo biharmonic map of a strongly pseudoconvex CR manifold into a Riemannian manifold of non-positive curvature must be pseudo harmonic." We show that the L^2-version of the above conjecture holds, i.e., "every pseudo biharmonic map of a strongly pseudoconvex complete CR manifold into a Riemannian manifold of non-positive curvature having finite pseudo bienergy and finite pseudo energy, is pseudo harmonic." Then, we show a characterization theorem for an isometric immersion with parallel pseudo mean curvature vector field, to be biharmonic. As its applications, we show for isometric immersions into the unit sphere or the complex projective space, with parallel pseudo mean curvature vector field to be biharmonic. Examples of pseudo biharmonic immersions will be given.

Il Direttore del Dipartimento