GEOMETRÍA TOPOLOGÍA
Universidad de Granada

SEMINARIO on "MAGNETIC MAPS"

Conferenciante: MARIAN I. MUNTEANU ("Al. I. Cuza" University of Iasi)

Resumen. We present some basic notions on magnetic curves on Riemannian manifolds and give several examples in dimension 3, emphasizing the case of Killing magnetic curves. We present some results on magnetic curves in almost contact metric geometry in arbitrary dimension. Later on we introduce the notion of magnetic map between Riemannian manifolds. Magnetic maps are generalizations of both magnetic curves and harmonic maps. We provide some fundamental examples of them. Further on we describe the problem in almost contact metric geometry. Then we produce examples of magnetic maps, having as either source or target manifold the tangent bundle of a Riemannian manifold equipped with several Riemannian metrics. In particular we study when the canonical projection, a vector field and the tangent map are, respectively, magnetic maps

Temas.
Magnetic curves on Riemannian manifolds
Geodesics and harmonic maps
Magnetic maps: definition and first examples
Magnetic maps in almost contact metric geometry
Magnetic maps and tangent bundle of a Riemannian manifold

Aula. A-25

Horario. Duración de 8 horas. Semana del 12 al 16 de septiembre. L. (9-10h), M. (9-11h), Mi. (9-11h), J. (9-11h), V. (12-13h).

Dirigido a: matemáticos, físicos y a estudiantes de grado y posgrado con conocimientos básicos de geometría riemanniana.

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