



In the framework of the activities of the PhD programme in Mathematical Sciences

Prof. **Marco Rigoli**

University of Milan

will offer a PhD course on

The geometry of Einstein-type structures and Phi-curvatures on Riemannian manifolds

Abstract

The aim of the course is to present a unified treatment of a number of geometric "objects" coming from Soliton theory and General Relativity. The investigation focuses on the notion of harmonic-Einstein manifolds, a notion introduced a few years ago with different purposes by R. Muller for regularity problems on the solutions of the harmonic maps flow. We develop a theory that in some respects parallels that of Einstein manifolds and we prove rigidity results and structure theorems. We then interpret some of them in the light of special cases related to solutions of Einstein fields equations;

Scheduling

The course will be held at the Department of Mathematics, Via C. Saldini n.50 – Milano

from 14 November to 6 December 2022

with the following scheduling:

15, 17, 21, 22, 24, 29 November and **5,6** December **hours 9.00 am – 12.00 pm**

14, 28 November, **hours 1.00 pm – 4.00 pm**

Room: **Aula Dottorato**, 1st floor