DOCTORAL PROGRAMME IN MATHEMATICAL SCIENCES

Per il Dottorato in Scienze Matematiche dell'Università degli Studi di Milano

la Prof.ssa **Cristina Tarsi**

del Dipartimento di Matematica dell'Università degli Studi di Milano

terrà un corso di dottorato su

A tour on Kirchhoff type problems

Abstract

The standard linear wave equation was derived first by d'Alambert in 1747 and Euler 1748. In 1876 Kirchhoff proposed a new model for free vibrations of elastic strings, which takes into account modifications in length of the string produced by transversal vibrations. Later on, in 1945 Carrier developed a more rigorous approach, as well as Narasimha in 1968. The nowadays called Kirchhoff string equation and its generalizations have been widely studied since the work of P.-L. Lions (1978), where an abstract functional framework was introduced.
This course will focus on the stationary elliptic version of Kirchhoff type problems, with a variational approach. We will mainly review the former existence and multiplicity results for equations with critical growth, highlighting the role of the nonlocal nature of the equations with respect to the local ones. We will consider both the cases of bounded and unbounded domains.

Calendario

Il corso si svolgerà **dal 19 aprile al 13 maggio 2021**
tramite piattaforma Zoom
Introduzione: Lunedì 19 aprile ore **9:00-10:00**

Lezioni successive:
dalle ore 9.00 alle ore 11.00,
nei seguenti giorni: **21**, **26**, **28** aprile e **4**, **6**, **11**, **13** maggio

Il link Zoom sarà fornito direttamente dalla docente