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## **SEMINÁRIO DE ANÁLISE E EQUAÇÕES DIFERENCIAIS**

**Dia 8 de Junho (quinta-feira), às 13h30, sala 6.2.33**

# **Non-local quantities and their application**

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**Abstract:**

Non-local quantities and fractional Sobolev norms has received an increasing amount of attention in the last decade due to the interesting property they present and their various application in different fields, from graph theory to PDEs. In the first part of the talk I will introduce these topics by starting with a general overview on such quantities and by talking about the state of arts. Then in the second part of my seminar I will talk about two results obtained in collaboration with Dejan Slepcev and Matteo Rinaldi, involving a non-local version of Mumford-Shah functional for graph and the non-local perimeter.

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