

# SEMINÁRIO

## ANÁLISE E EQUAÇÕES DIFERENCIAIS

**16 de Dezembro | 13h30 | sala 6.2.33**

**An equation with many interesting aspects**

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**Abstract:**

The Hénon equation, used for modeling some phenomena in astrophysics, is an excellent prototype for the investigation/introduction of some important problems on the qualitative analysis of solutions of elliptic partial differential equations. In this lecture I will address the following themes: The critical exponent for the Hénon equation; The symmetry of the least energy solutions; The symmetry of the least energy nodal solutions; The Morse index of radial nodal solutions; Some concentration phenomena.



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