On the solutions of the Hénon equation

Ederson Moreira dos Santos[1]

[1] Universidade de São Paulo - São Carlos

The Hénon equation, used for modeling some phenomena in astrophysics, is an excellent prototype for the qualitative analysis of solutions of elliptic partial differential equation. In this talk I will address the following topics: The critical exponent for the Hénon equation; The symmetry of least energy solutions; The symmetry of least energy nodal solutions; Qualitative properties of radial solutions (in collaboration with Wendel Leite da Silva).