Unique continuation principles for Lane-Emden systems

${\bf Gabrielle\ Normberg^1}$

In this talk we discuss some unique continuation results for systems of elliptic partial differential equations satisfying a suitable super-linearity condition. As an application, we obtain nonexistence of nontrivial radial solutions in the critical and supercritical regimes, for the Lane-Emden system posed in a ball.

Joint work with Ederson Moreira dos Santos (ICMC-USP) and Nicola Soave (Politecnico di Milano).

 $^{^{1}}$ Universidade de São Paulo - São Carlos