



Stockholms Matematikcentrum

# Vicentiu Radulescu: Singular phenomena in nonlinear elliptic equations

**Time:** Wed 2016-01-27 10.30 - 11.30

**Lecturer:** Vicentiu Radulescu (Institute of Mathematics of the Romanian Academy and University of Craiova)

**Location:** Room 306, building 6, Kräftriket, Department of Mathematics, Stockholm University

**Abstract:** We are concerned with the study of some perturbation effects in two classes of nonlinear elliptic equations. Our analysis starts with the behaviour of singular solutions with blow-up boundary. Next we consider the case of elliptic equations involving singular terms. In all situations, we establish existence, nonexistence, and bifurcation properties of solutions. Connections with the maximum principle and the Keller-Osserman property are also established.