

## **Minisymposium:** **Concentration phenomena in nonlinear elliptic problems**

*Organizer: Manuel del Pino (Santiago)*

**Aims and scope.** Nonlinear elliptic problems arising in a broad range of applications commonly involve small parameters, which when taken to limiting values give rise to *concentration phenomena*, namely to the presence of families of solutions which exhibit interesting localized patterns, in the form of singular limits formed on lower dimensional sets. Examples that have attracted a lot of research include: Nonlinear Schrödinger equations, phase transition phenomena in material science and superconductivity, systems of biological theory of pattern formation, bubbling phenomena associated to critical Hardy-Sobolev embeddings. Variational, topological and perturbation techniques are typical tools for the construction of families of solutions exhibiting interesting concentration patterns. In this minisymposium, recent progress in these and related issues will be reported.

### **Tentative list of speakers**

- Silvia Cingolani (Bari)
- Veronica Felli (Milan)
- Anna Maria Miccheletti (Pisa)
- Eugenio Montefusco (Rome)
- Riccardo Molle (Rome)
- Piero Montecchiari (Ancona)
- Marta Nolasco (LAquila)
- Benedetta Pellacci (Napoli)
- Miguel Ramos (Lisbon)
- Bernhard Ruf (Milan)