



ONE DAY ON SHAPE OPTIMIZATION

Tuesday November 17, 2009
Aula Buzano - Dipartimento di Matematica
POLITECNICO DI TORINO

These lectures will address a non-specialized audience and will present an introduction to "Shape Optimization", a very active research field which combines techniques from several areas of mathematics to set out and solve problems where the optimal shape of an object has to be determined, in order to maximize or minimize a given functional under certain constraints. In particular, the problems which will be discussed can be of interest for people working in mathematical analysis, mathematical physics, numerical analysis, differential geometry, control and optimization.

PROGRAM

9.30-11.00. **Giuseppe Buttazzo**: Spectral optimization problems, part I.

11.30-12.30. **Sergey Nazarov**: The Eshelby theorem and the optimization of a patch.

14.30-16.00. **Dorin Bucur**: Spectral optimization problems, part II.

16.30-17.30. **Filippo Santambrogio**: Asymptotical optimization of resources distribution in mechanical and geographical problems.

ORGANIZATION

Valeria Chiadò Piat – Paolo Tilli