

Ph.D. programme in Mathematics and Computer Science

Short course on (SINGLE VEHICLE) ARC ROUTING PROBLEMS

Speaker: Prof. Ángel Corberán, University of Valencia

Organization:

- 1. Arc Routing Problems: An Introduction (History and applications)
- 2. The Chinese Postman Problem on undirected, directed, mixed and windy graphs: formulations, associated polyhedra, and heuristic and exact methods.
- 3. The Rural Postman Problem and the General Routing Problem on undirected, directed, mixed and windy graphs: formulations, associated polyhedra, and heuristic and exact methods.
- 4. Some generalizations: The Generalized Directed Rural Postman Problem (also called the Close Enough Arc Routing Problem)
- 5. Arc routing problems with profits. The Maximum Benefit Chinese Postman Problem.

Schedule:

All the lessons will take place from <u>15:00 to 18:00</u> in the Seminary Room of the Department of Mechanical, Energy and Management Engineering, Building <u>44C</u>, floor 2nd **Monday 15: Lessons 1 and 2 (2,5 hours)**

Tuesday 16: Lesson 3 (2,5 hours)

Wednesday 17: Lessons 4 and 5 (2,5 hours)

Short Biography:

Ángel Corberán is a Professor of Statistics and Operations Research at the Faculty of Mathematics of the University of Valencia (Spain). He started studying arc routing problems 35 years ago under the supervision of Professor Nicos Christofides of the Imperial College. He has published more than 60 papers in combinatorial optimization and is coordinating editor of *Computational Optimization and Applications* and a member of the editorial board of *Computers & Operations Research*, the *EURO Journal on Transportation and Logistics*, and the *EURO Journal on Computational Optimization* problems, mainly in the routing and location areas.