

ESGI 119

June 27th - July 1st 2016

Who can participate?

The academic participants are a diverse group of people, including postgraduate students, postdoctoral fellows, and professors, with expertise in Mathematical fields such as Operations Research, Optimization, Statistics, Numerical Analysis, Computer Sciences, Physics, Finances, Industrial Engineering, Mechanical Engineering, Electrical Engineering, among others.

If you have mathematical background in one of these fields, come to ESGI 119 at Porto and contribute to solving a challenging problem, practice your knowledge, and learn new skills.

How to participate?

Register now at

www.estgf.ipp.pt/esgi/

There is no participating fee for academics and PhD students, but the registration is mandatory.

Organizing Committee

Eliana Costa e Silva, CIICESI/ESTGF-IPP
Aldina Correia, CIICESI/ESTGF-IPP
Isabel Cristina Lopes, LEMA/ESEIG-IPP
Manuel Cruz, LEMA/ISEP-IPP
Adérito Araújo, LCM-CMUC
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Contact us at **esgi@estgf.ipp.pt**

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INDUSTRIAIS
E DE GESTÃO

The 119th European Study Group with Industry will take place from June 27th to July 1st in Porto, Portugal.

This meeting is part of the series of European Study Groups with Industry and will bring together several academics with a large experience in industrial mathematics to tackle problems that the leading industries are facing.

These events provide the industry with the insights, expertise and input of researchers from different disciplines and with various experiences.

Using mathematical modelling, the participants work collaboratively in addressing the problems posed by the companies and suggesting techniques of their expertise that may lead to a solution and therefore contribute to the technological progress.

Monday, June 27th

The Industrial Problems are presented by the companies' representative. This is followed by academic researchers forming brainstorming groups for each problem.

Tuesday - Thursday, June 28th - 30th

The groups work on each problem. Mathematical models are formulated, analytical and computational techniques applied and recommendations formulated.

Friday, July 1st (morning)

Problem-solving teams make presentations of their models and results to all participants and companies.

**PORTO, JUNE 27th to JULY 1st:
INDUSTRY MEETS MATHEMATICS.**

In previous Portuguese editions of ESGI



- Modelling and optimization of production scheduling
- Physical model of MDF boards
- Setting the Reserve Fleet
- Surgical cases packages
- Prediction model to textile parameters
- Airline maintenance technicians timetabling
- Packing and shipping cardboard tubes efficiently
- Modelling percolation and fractal structure in aerogels
- Customer's expected energy consumption

More info about previous editions at
<http://webpages.fc.ul.pt/~psfreitas/esgip.html>

After ESGI

Each team prepares a short written report of their progress, with special emphasis on end-user applications.

About the venue

The event will take place at Porto Design Factory, in Portugal.

Porto is the second largest city in Portugal, with a vast surrounding of industrial tissue, and it is famous worldwide by its wine production, cork, footwear, textile and furniture.

Porto is also a beautiful city that has attracted tourism lately: its historic centre was recognized in 1996 by UNESCO as a World Heritage Site, and Porto has been voted more than once as best European city break.

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EUROPEAN STUDY GROUP WITH INDUSTRY

