



Coming Events



92nd European Study Group with Industry 2012 May, 6–10, 2013

ISEC—Institute of Engineering, Polytechnic of Coimbra,
Coimbra—Portugal
<http://dfm.isec.pt/esgi92/>

The 92nd European Study Group with Industry will be held from May 6 to May 10 2013 at ISEC (<http://www.isec.pt/>), the Coimbra Institute of Engineering, Polytechnic of Coimbra, Portugal, organized by the Department of Mathematics and Physics, ISEC-DMF (<http://www.dfm.isec.pt/>) and LCM – Laboratory for Computational Mathematics (<http://www.uc.pt/uid/lcm>) of Centre for Mathematics of the University of Coimbra (<https://cmuc.mat.uc.pt/rdonweb/>).

This meeting is part of the series of European Study Groups and will count with the participation of several European experts with a large experience in this type of events. The purpose of these meetings is to strengthen the links between Mathematics and Industry by using Mathematics to tackle industrial problems, which are proposed by industrial partners.

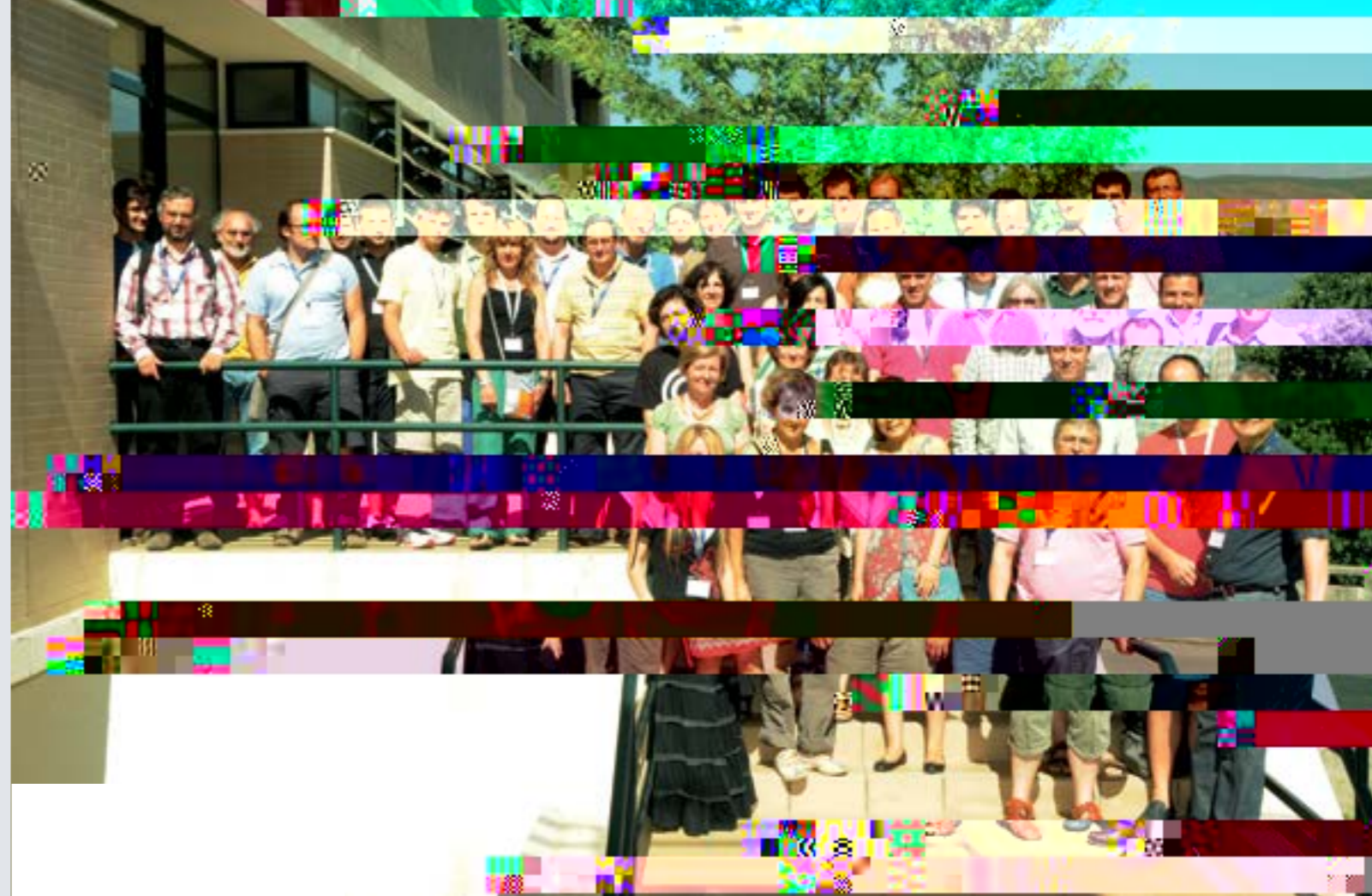
More information on Portuguese Study Groups is available at <http://www.ciul.ul.pt/~freitas/esgip.html>, while general information on study groups and related aspects is available at the International Study Groups website (<http://www.maths-in-industry.org>), the Smith Institute (<http://www.smith-inst.ac.uk>) and the European Consortium for Mathematics in Industry (<http://www.ecmi-indmath.org/info/events.php>).

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by Manuel Delgado [CMUP and DM-FCUP, University of Porto] and
Pedro García Sánchez [Dep. Álgebra, University of Granada]



Valentina.— Numerical semigroups is apparently a narrow subject, but it gathers people from different areas.

Thus, the most interesting talks in the meeting were for me the talks where also other subjects, e.g. from commutative algebra or from code theory, appear.

It was also interesting and useful to meet personally some mathematicians who worked on similar problems than me and that I know only through their papers.

The meeting was also pleasant because there are not people that consider themselves big stars, as sometime happens, and there was a very nice cooperative atmosphere.

José Carlos.— These meetings are very useful since they encourage the grouping of mathematicians interested in the study and

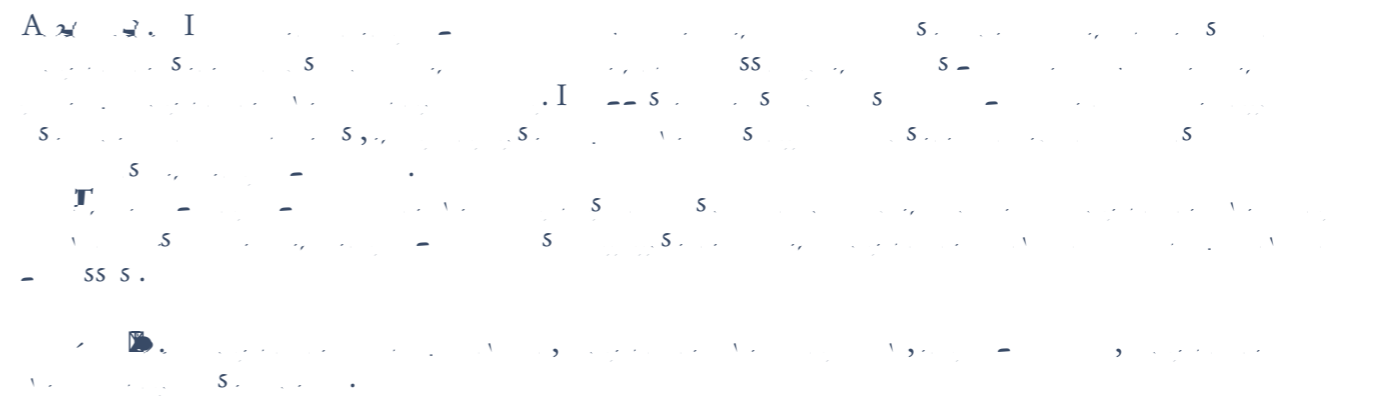
applications of numerical semigroups coming from all over the world. This provides a contact at first hand with the latest advances in this field. It also provides discussions between different researchers that could not happen otherwise.

Ralf.— It is very important to have a chance to meet people in this relatively narrow area. This gives possibilities to talk about problems, but still to get views from different angles.

Scott.— I think it is highly useful. Most of the participants at the IMNS meetings found numerical semigroups by working in some other area. In my case, it was Commutative Algebra. In other cases, it was Computer Science, Graph Theory, Algebraic Geometry, The list is almost endless. I am not so sure that the intersection mentioned above is so small. In fact, I think it has grown drastically over the past 10 years and I believe that attendance at the next IMNS meetings will exceed that of any of the first three editions of this congress.

The multivariate extremal index and tail dependence

by Helena Ferreira*



1. INTRODUCTION

Let (X_1, \dots, X_n) be a random vector with joint cumulative distribution function $F(x_1, \dots, x_n)$ and marginal cumulative distribution functions $F_i(x_i) = P(X_i \leq x_i)$, $i = 1, \dots, n$. The multivariate extremal index λ is defined as the limit

$$\lambda = \lim_{t \rightarrow \infty} \frac{F(t, \dots, t)}{F_1(t) \cdots F_n(t)},$$

provided the limit exists. The multivariate extremal index λ is a measure of the tail dependence of the random vector (X_1, \dots, X_n) . The multivariate extremal index λ is a measure of the tail dependence of the random vector (X_1, \dots, X_n) . The multivariate extremal index λ is a measure of the tail dependence of the random vector (X_1, \dots, X_n) .

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C. $\int_0^1 \frac{1}{x} dx$ is not a proper Riemann integral.

$$\int_0^1 \frac{1}{x} dx = \lim_{\epsilon \rightarrow 0^+} \int_{\epsilon}^1 \frac{1}{x} dx$$

Numerical semigroups problem list

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Tracing orbits on conservative maps

by Mário Bessa*

. INTRODUCTION

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92nd European Study Group with Industry

6-10 May 2013
Coimbra.ISEC

Free Registration

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Organizers

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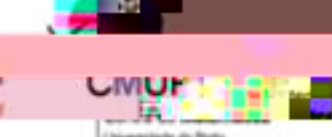
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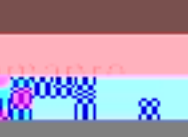
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