



International Spring School on Matrix Functions and their applications Wednesday May 15 to Friday May 17, 2013 Salle de Réunion, Bâtiment M2

**Laboratoire Paul Painlevé UMR 8524
Université de Lille 1, France**

Matrix functions are useful tools not only in applied mathematics and scientific computing, but also in various other fields like control theory, electromagnetism or the research on complex networks like social networks. The present meeting, being part of the "First Thematic Semester Painlevé-CEMPI-Phlam 2013", includes four comprehensive 4h-lectures about matrix functions and their applications.

Valeria Simoncini (Università di Bologna, Italia): *Computational aspects in large scale matrix function approximations.*

Lothar Reichel (Kent State University, Ohio, USA): *Error Bounds and Estimates for Matrix Functions.*

Paul Van Dooren (UC Louvain, Belgium): *Model reduction of large scale dynamical systems.*

Michele Benzi (Emory University, Georgia, USA): *Theory and Computation of Matrix Functions with Applications to Network Analysis and Quantum Chemistry.*

Timetable:

Wednesday	Thursday	Friday
09h30-10h30: Simoncini 1	09h30-10h30: Reichel 2	09h30-10h30: Van Dooren 3
10h30-11h00: Coffee break	10h30-11h00: Coffee break	10h30-11h30: Coffee break and Poster session(*)
11h00-12h30: Simoncini 2	11h00-12h30: Reichel 3	11h30-12h30: Benzi 1
13h00-14h00: Lunch (RU Barrois)	13h00-14h00: Lunch (RU Barrois)	13h00-14h00: Lunch (RU Barrois)
14h30-16h00: Simoncini 3	14h30-16h00: Van Dooren 1	14h30-16h00: Benzi 2
16h00-16h30: Coffee break	16h00-16h30: Coffee break	16h00-16h30: Coffee break
16h30-18h00: Reichel 1	16h30-18h00: Van Dooren 2	16h30-18h00: Benzi 3

(*) Posters presented by: Caterina Fenu (University of Cagliari), Peter Kandolf (University of Innsbruck), Omer Tari (Middle East Technical University), Bernd Beckermann (Université de Lille), Antti Koskela (University of Innsbruck), Zdenek Strakos (Charles University in Prague)

Organizers: Bernhard Beckermann (Labo Painlevé, Lille), Abderrahman Bouhamidi (LMPA, Calais), Karl Deckers (Labo Painlevé, Lille), Ana C. Matos (Labo Painlevé, Lille)

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