

The fifth Singular Days

April 23th–27th, 2007

CIRM, Luminy, Marseille (France)

Scientific Committee

S. Brenner, Columbia, USA
M. Costabel, Rennes, France
M. Dauge, Rennes, France
M. Moussaoui, Lyon, France
S. Nicaise, Valenciennes, France
A. Sändig, Stuttgart, Germany
J. Sokolowski, Nancy, France

Organizing Committee

M. Dauge, Univ. Rennes 1, France
S. Nicaise, Univ. Valenciennes, France

Sponsors

CIRM, Luminy, France

Institut Elie Cartan, Université de Nancy 1, France

Université de Rennes 1, France

Université de Valenciennes et du
Hainaut-Cambrésis, France

Schedule

► Monday 23

10:15–10:45	<i>Wellcome and coffee</i>
10:45–11:00	<i>Opening session</i> Room: Auditorium
	A.-M. Sändig, Univ. Stuttgart, Germany
11:00–11:40	Asymptotic models of piezoelectric stack actuators with thin metal inclusions
11:45–12:25	V. Kozlov, Univ. Linköping, Sweden On the Hadamard formula for non-smooth domains
12:30–14:00	Lunch
	E. Bonnetier, Imag Grenoble, France
16:00–16:40	Pointwise bounds on the gradients in a composite medium via integral equations
	S. Tordeux, Insa Toulouse, France
16:45–17:25	2D-1D Coupling in a Problem related to the Scattering of Time-Harmonic Waves
17:30–18:00	Round table

► **Tuesday 24**

9:00–9:40	L.-Y. Sung, Louisiana State Univ., USA Nonconforming methods for electromagnetics
9:45–10:25	G. Schmidt, WIAS, Berlin, Germany Regularity of solutions to anisotropic transmission problems in the plane
10:30–11:00	<i>Coffee break</i>
11:00–11:40	C. De Coster, Univ. Littoral, France Lower and upper solutions for elliptic problems in nonsmooth domains
11:45–12:25	J. Sokolowski, Univ. Nancy 1, France Singular perturbations and boundary topological derivatives
12:30–14:00	<i>Lunch</i>
15:30–16:00	<i>Coffee break</i>
16:00–18:00	<i>Poster session</i> C. Chniti, S. Cochez-Dhondt, A. Laurain, A. Makhlof, C. Scheid

► Wednesday 25

	M. Costabel, Univ. Rennes 1, France
9:00–9:40	Corner regularity in non-weighted Sobolev spaces and Mellin transformation
9:45–10:25	G. Hechme, Ensta, Paris, France On eigenvalue computations for the Maxwell equations
10:30–11:00	<i>Coffee break</i>
11:00–11:40	A. Khladnev, Novosibirsk, Russia Evolution of a crack with kink and non-penetration
11:45–12:25	D. Knees, WIAS, Berlin, Germany Global spacial regularity of solutions of an elasto-viscoplastic model
12:30–14:00	<i>Lunch</i>
	<i>Free afternoon</i>

► Thursday 26

	V. Nistor, Penn State Univ., USA
9:00–9:40	Regularity for polyhedral domains and mesh refinement in 3D
9:45–10:25	A. Sene, Univ. C. A. Diop, Dakar, Sénégal Control of the coefficients of singularities of the solution of the Laplace equation in a polygonal domain
10:30–11:00	<i>Coffee break</i>
11:00–11:40	V. B. Vasil'ev, Bryansk, Russia Wave factorization and boundary value problems in non-smooth domains
11:45–12:25	J. Rehberg, WIAS, Berlin, Germany An elliptic model problem including mixed boundary conditions and material heterogeneities
12:30–14:00	<i>Lunch</i>
15:30–16:00	<i>Coffee break</i>
16:00–18:00	<i>Poster session</i> V. Bonnaillie-Noël, X. Claeys, M. Dambrine, E. Priel, M. Thomas

► Friday 27

	X. Claeys, Inria, Rocquencourt, France
9:30–10:10	A generalized Holland model for wave diffraction by thin wires
10:15–10:55	M. Thomas, Humboldt Univ., Berlin, Germany Griffith formula for interface-cracks
11:00–11:30	<i>Coffee break</i>
11:30–12:10	Z. Yosibash, Ben-Gurion Univ., Israel Edge singularities in elastic anisotropic materials and multi-material interfaces
12:30–14:00	<i>Lunch</i>