

Fourth Tunisian-Japanese Conference
In honor of Jean Ludwig

Geometric and Harmonic Analysis
on Homogeneous Spaces and Applications

Monastir, December 18-23, 2015

Program

1.

SATURDAY: DECEMBER 19, 2015

08:45 **Opening**

09:00 — 9:30 **D. Arnal** (Dijon)

Jean Ludwig: Walking with a mathematician.

09:30 — 10:00 **H. Fujiwara** (Fukuoka)

Collaboration with Jean Ludwig.

10:00 — 10:15 **Honoring Jean Ludwig**

10:15 — 10:45 **Coffee break**

10:45 — 11:30 **I. Beltita** (Bucharest)

Spectral synthesis for coadjoint orbits of nilpotent Lie groups.

11:40 — 12:25 **R. Lakshmi Lavanya** (Tirupati, India)

Revisiting the Fourier transform on the Heisenberg group.

LUNCH

14:30 -- 15:15 **S. Bejar** (Sfax)
Deformation of locally Euclidean geometries.

15:25 -- 16:10 **R. Daher** (Casablanca)
Solvability on Riemannian symmetric spaces

16:20 -- 16:50 **Coffee break**

2.

16:50 -- 17:20 PARALLEL SESSIONS OF 30 MINUTES.

16:50 -- 17:20 **Rabeb Sidaoui** (Sfax)
Deformation of locally Euclidean geometries. Cohomology of $sl(2)$ acting on the space of n -ary differential operators on $\mathbb{R}$.

16:50 -- 17:20 **R. Jday** (Tunis)
Inequalities For Clifford-Fourier Transform.

16:50 -- 17:20 **W. Aloulou** (Sfax)
Hom-Gerstenhaber algebras up to homotopy.

3.

17:30 -- 18:00 PARALLEL SESSIONS OF 30 MINUTES.

17:30 -- 18:00 **S. Ghaour** (Sfax)
Study of deformation spaces of connected nilpotent Lie groups.

17:30 -- 18:00 **M. Bensaid** (Tunis)
Turán type inequality for q -special functions.

17:30 -- 18:00 **F. Sadki** (Sfax)
On the Chabauty space of a locally compact group.

DINNER

4.

SUNDAY: DECEMBER 20, 2015

08:30 — 09:15 **N. Bensalem** (Tunis)

The Hardy space H^1 in the rational Dunkl setting.

09:25 — 10:10 **M. Duflo** (Paris)

On the restriction of discrete series of a real reductive Lie group to a subgroup locally isomorphic to $SL(2; R)$.

10:20 — 10:50 **Coffee break**

10:50 — 11:35 **T. Yoshino** (Tokyo)

Vertical and horizontal rigidity.

11:45 — 12:30 **I. Kédim** (Bizerte)

Fresh results on the deformation theory of discontinuous groups acting on homogeneous spaces.

LUNCH

14:30 — 15:15 **H. Ishi** (Nagoya)

On the space of holomorphic equivalence classes of bounded homogeneous domains.

15:25 — 16:10 **A. Boussejra** (Kénitra)

Poisson transform on homogeneous vector bundles.

16:20 — 16:50 **Coffee break**

5.

16:50 — 17:20 PARALLEL SESSIONS OF 30 MINUTES.

16:50 — 17:20 **S. Benayed** (Sfax)

Variants of a Müntz-Szász analogues for Euclidean Spin groups.

16:50 — 17:20 **F. Thabet** (Gabès)

Trajectories of quadratic differentials for generalized Laguerre and Jacobi polynomials.

16:50 — 17:20 **J. Boujelben** (Sfax)

Bilinear differential operators: projectively equivariant symbols and quantization maps.

6.

17:30 — 18:00 PARALLEL SESSIONS OF 30 MINUTES.

17:30 — 18:00 **B. Dali** (Bizerte)

Note on the cortex of some exponential Lie groups.

17:30 — 18:00 **S. Jendoubi** (Sfax)

Intertwining operators for holomorphic multiplier representation and their infinitesimal generators.

17:30 — 18:00 **Z. Saoudi** (Sfax)

Contact supersymmetries of modules of differential operators.

DINNER

7.

MONDAY: DECEMBER 21, 2015

08:30 -- 09:15 **J. Ludwig** (Metz)
The group algebra $L^1(G)$.

09:25 -- 10:10 **D. Poguntke** (Bielefeld)
Ideals in $L^1(G)$ associated with compact orbits in the unitary dual of a nilpotent Lie group G .

10:20 -- 10:50 **Coffee break**

10:50 -- 11:35 **J. Inoue** (Tottori)
 L^p -Fourier transforms on compact extensions of unimodular Lie groups.

11:45 -- 12:30 **S. Azouazi** (Sfax)
Beurling's theorem for compact extensions of $\mathbb{R}^n$.

LUNCH

8.

TUESDAY: DECEMBER 22, 2015

08:30 — 09:15 **J. Faraut** (Paris)
Asymptotic spherical analysis.

09:25 — 10:10 **A. Hassairi** (Sfax)
Beta-hypergeometric probability distribution on symmetric matrices.

10:20 — 10:50 **Coffee break**

10:50 — 11:35 **A. Makhlouf** (Haute Alsace)
Twistings of algebra and bialgebra structures.

11:45 — 12:30 **J. Cole** (Tsukuba)
The Philosophy of Mathematical Modeling and Numerical Simulation: Surprises from the Wave Equation and its Finite Difference Models.

LUNCH

14:30 — 15:15 **N. Shimeno** (Sanda)
Matrix-valued commuting family of differential operators associated with symmetric spaces.

15:25 — 16:10 **S. Kabbaj** (Kénitra)
On solutions of D'Alembert's functional equation.

16:20 — 16:50 **Coffee break**

9.

16:50 — 17:20 PARALLEL SESSIONS OF 30 MINUTES

16:50 — 17:20 **M. Maslouhi** (Kénitra)

An Integral expression for the Dunkl kernel in the dihedral setting.

16:50 — 17:20 **T. Bechr** (Sfax)

Modules of bilinear differential operators over the orthosymplectic superalgebra $osp(1|2)$.

16:50 — 17:20 **M. Akriche** (Bizerte)

Invariants réels d'un pinceau en courbe de genre 2.

10.

17:30 — 18:00 PARALLEL SESSIONS OF 30 MINUTES

17:30 — 18:00 **A. Bentaleb** (Meknes)

On extension and refinement of the Poincaré inequality.

17:30 — 18:00 **Y. Bouaziz** (Sfax)

Quadratic overgroups for Diamond Lie groups.

17:30 — 18:00 **M. Boussoffara** (Sfax)

Deforming discontinuous groups of 3-step nilpotent Lie groups.

08:30 — 09:15 **A. Sasaki** (Hiratsuka)

Admissible representations, multiplicity-free representations, and visible actions on non-tube type Hermitian symmetric spaces.

09:25 — 10:10 **B. Agrebaoui** (Sfax)

Diamond cones for classical Lie superalgebras.

10:20 — 10:50 **Coffee break**

10:50 — 11:35 **D. Manchon** (Clermont-Ferrand)

Transfer group for renormalized multiple zeta values.

CLOSING

LUNCH