Program of the 8th edition of the conference

Functional Equations in LIMoges

FELIM 2015

March 23-25, 2015

Organised by

Moulay Barkatou, Thomas Cluzeau, Carole El Bacha, Suzy Maddah, and Jacques-Arthur Weil

Salle de Conférences XLIM 3

Sponsored by

XLIM & Département Mathématiques et Informatique & Région Limousin

FELIM 2015, Functional Equations in LIMoges

Monday, March 23

9:00-9:15	Welcome

9:15-10:15	**Werner Seiler**: *Geometric Singularities of Algebraic Differential Equations*

10:15-10:45	Coffee break, Discussions

10:45-11:15	**Jorge Mozo Fernández**: *Polynomial asymptotics and summability*
11:15-11:45	**Eckhard Pfluegel**: *Pseudo-Linear Matrix-Transformation Techniques and Applications to Cryptography*
11:45-12:15	**Jean-Claude Yakoubsohn**: *A numerical study for the Newton method in the singular case*

12:15-14:00	Lunch break

14:00-15:00	**Peter Olver** : *Algebras of Differential Invariants*

15:00-15:30	Coffee break, Discussions

15:30-16:00	**Loïc Teyssier**: *Computing Dessins d'Enfants*
16:00-16:30	**Juan Viu Sos**: *On the geometry of line arrangements and polynomial vector fields*
16:30-17:00	**Yacine Bouzidi**: *Algebraic techniques for testing the structural stability of multidimensional systems*

FELIM 2015, Functional Equations in LIMoges

Tuesday, March 24

9:00-10:00   **Frédéric Chyzak**: *Hypergeometric generating series for small-step walks in the quarter plane*

10:00-10:30   Coffee break, Discussions

10:30-11:00   **Marko Petkovšek**: *On d'Alembertian and Liouvillian Sequences*

11:00-11:30   **Charlotte Hulek**: *On the analytic reduction of singularly perturbed differential equations*

11:30-12:00   **Maximilian Jaroschek**: *Formal Reduction of a Class of Pfaffian Systems in Several Variables*

12:00-14:00   Lunch break

14:00-15:00   **Georg Regensburger**: *Positive steady states and solutions of polynomial systems with real exponents*

15:00-15:30   Coffee break, Discussions

15:30-16:00   **Frédéric Pierret**: *Modeling and Scale dynamics*

16:00-16:30   **Alban Quadrat**: *A constructive algebraic analysis approach to Artstein's reductions*

20:00-   Dinner

FELIM 2015, Functional Equations in LIMoges

Wednesday, March 25

9:00-10:00 **Camilo Sanabria**: *Classifying Standard Equations*

10:00-10:30 Coffee break, Discussions

10:30-11:00 **Thomas Dreyfus**: *Isomonodromic deformation for Fuchsian q-difference equations and confluence.*

11:00-11:30 **Thierry Combot**: *Fast computation of Liouvillian solutions of difference equations*

11:30-12:00 **Roman N. Lee**: *Factoring out parameter dependence in linear differential systems*

12:00-14:00 Lunch break

14:00-14:30 **Islam Boussaada**: *Tracking the algebraic multiplicity of crossing imaginary roots for time-delay systems: A functional confluent Vandermonde-based framework*

14:30-15:00 **Sergei Abramov**: *The EG-family of algorithms and procedures for solving linear differential and difference higher-order systems*

15:00-15:30 **Alexander Prokopenya**: *Quantum Algorithm for Phase Estimation: Simulation with Wolfram Mathematica*

15:30- Coffee break, Discussions