

**Conference in honor of Peter Takáč's birthday**  
**Conference Program**

**Thursday June 6, 2019, MH001**

|              |              | <b>Chairman : Jacqueline Fleckinger</b>  |  |
|--------------|--------------|--|--|
| <b>9h30</b>  | <b>10h15</b> | <b>Jean-Pierre Gossez</b><br>Université libre de Bruxelles   | Elliptic systems with a gradient term having natural growth.   |
| <b>10h15</b> | <b>10h45</b> | <b>Coffee break</b>  |  |
| <b>10h45</b> | <b>11h30</b> | <b>Mabel Cuesta</b><br>Université du Littoral Côte d'Opale   | Existence of positive and nodal solutions for quasilinear elliptic equations with Steklov nonlinear boundary conditions of critical growth.                        |
| <b>11h30</b> | <b>12h15</b> | <b>Vladimir Bobkov</b><br>University of West Bohemia; Institute of Mathematics of Ufa Federal Research Centre. | On the Fredholm-type theorems and sign properties of solutions for the $(p, q)$ -Laplacian.  |
| <b>12h30</b> | <b>14h00</b> | <b>Lunch</b>   |  |
|              |              | <b>Chairman : Pascal Bégout</b>  |  |
| <b>14h00</b> | <b>14h45</b> | <b>Jesús Ildefonso Díaz</b><br>Universidad Complutense de Madrid, Spain  | Beyond the unique continuation: flat solutions for reactive slow diffusions, the infinite and Hardy potential for Schrödinger equation and $2 - d$ electron beams. |
| <b>14h45</b> | <b>15h30</b> | <b>Juan Francisco Padial</b><br>Departamento de Matemática Aplicada Universidad Politécnica de Madrid          | Parabolic systems associated with a traffic flow on two-lane. An uniqueness result.  |
| <b>15h30</b> | <b>16h00</b> | <b>Coffee Break</b>  |  |
| <b>16h00</b> | <b>16h45</b> | <b>Maya Chhetri</b><br>University of North Carolina  | Positive solutions for a class of superlinear semipositone problems.   |

**Friday June 7, 2019, MH001**

| <b>Chairman : Peter Takáč</b>       |              |  |   |
|-------------------------------------|--------------|--|---|
| <b>9h30</b>                         | <b>10h15</b> | <b>Jean-Michel Rakotoson</b><br>Université de Poitiers                     | Potential-Capacity, properties and applications to some Schrödinger type problems.                    |
| <b>10h15</b>                        | <b>10h45</b> | <b>Coffee break</b>  |   |
| <b>10h45</b>                        | <b>11h30</b> | <b>Jochen Merker</b><br>Leipzig University of Applied Sciences,<br>Germany | On very weak solutions of semilinear elliptic PDEs with singular integral Neumann boundary data.      |
| <b>11h30</b>                        | <b>12h15</b> | <b>Petr Girg</b><br>University of West Bohemia                             | $p$ -Laplacian - history, mathematical models from hydrology and natural gas extraction, experiments. |
| <b>12h30</b>                        | <b>14h00</b> | <b>Lunch</b>   |   |
| <b>Chairman : Bénédicte Alziary</b> |              |  |   |
| <b>14h00</b>                        | <b>14h45</b> | <b>Jiří Benedikt</b><br>University of West Bohemia                         | $p$ -Laplacian - maximum and comparison principles, uniqueness versus nonuniqueness.                  |
| <b>14h45</b>                        | <b>15h30</b> | <b>Lukáš Kotrla</b><br>University of West Bohemia                          | $p$ -Laplacian - applications of the theory to mathematical models.                                   |
| <b>15h30</b>                        | <b>16h00</b> | <b>Coffee Break</b>  |   |
| <b>16h00</b>                        | <b>16h45</b> | <b>Françoise Chatelin</b><br>Université Toulouse 1 Capitole                | Creativity in non linear Computation according to Dickson and Watkins.                                |

**Dinner**

**Saturday June 8, 2019, MH001**

| <b>Chairman : Ian Schindler</b> |              |  |  |
|---------------------------------|--------------|--|--|
| <b>10h00</b>                    | <b>10h45</b> | <b>Guy Vallet</b><br>Université de Pau et des pays de<br>l'Adour | On Lewy-Stampacchia's inequalities.  |
| <b>10h45</b>                    | <b>11h15</b> | <b>Coffee break</b>  |  |
| <b>11h15</b>                    | <b>12h00</b> | <b>Falko Baustian</b><br>University of Rostock, Germany          | Polynomial approximation for the Heston model.                               |
| <b>12h00</b>                    | <b>12h30</b> | <b>Bénédicte Alziary</b><br>Université Toulouse 1 Capitole       | Overview of CeReMaths's scientific topics in collaboration with Peter Takáč. |