# **List of Talks**

Winter Seminar and Klausurtagung, La Clusaz (France), January 27 - 31, 2014

#### Monday, January 27

| Time          | Speaker   | Title of Talk  |
|---------------|-----------|--|
| 09:00 - 10:00 | Titi      | GlobalWell-posedness of an Inviscid Three-dimensional Pseudo-      |
|               |           | Hasegawa-Mima-Charney-Obukhov Model,Part I                         |
| 10:10 - 10.30 | Koba      | On stability of Leray's stationary solutions of the Navier-Stokes  |
|               |           | system in exterior domains   |
| 10:40 - 11:00 | Mizerova  | Pressure - stabilized characteristics finite element scheme for    |
|               |           | the Peterlin viscoelastic model                                    |
| 11:20 - 11:40 | Zi        | Global solution tO the incompressible Oldroyd-B Model in the       |
|               |           | critical $L^p$ framework: the case of non-small coupling parameter |
| 14:50 - 12:10 | Murata    | Local in time unique existence theorem for the compressible        |
|               |           | fluid flow   |
| LUNCH         |           |  |
| 16:00 - 16:20 | Tezuka    | Global Stability Analysis of Flow around Cylinder and Spheroid     |
| 16:30 - 16:50 | Ushikoshi | New approach to the Hadamard variational formual for the           |
|               |           | Green function of the Stokes equations                             |
| 17:00 - 17:20 | She       | Linear stability analysis of plane Couette flow for the Oldroyd-B  |
|               |           | fluid  |
| 17:30 - 17:50 | Notsu     | P1/P1-stabilized characteristics finite element schemes for flow   |
|               |           | problems   |

### Tuesday, 28th

| Time          | Speaker          | Title of Talk   |
|---------------|------------------|---|
| 09:00 - 12:00 | Free Discussions |   |
| LUNCH         |                  |   |
| 14:00 - 17:00 | Free Discussions |   |
| 17:00 - 18:00 | Bothe            | Continuum thermodynamics of chemically reacting fluid |
|               |                  | systems using partial momenta                         |
| 18:30 - 20:00 | DINNER           |   |
| 20:00 - 21:00 | Zatorska         | On the Navier-Stokes-Maxwell-Stefan system for com-   |
|               |                  | pressible mixtures                                    |

## Wednesday, 29th

| Time          | Speaker             | Title of Talk  |
|---------------|---------------------|--|
| 09:00 - 10:00 | Monniaux            | Traces theorems for vector fields in special Lipschitz |
|               |                     | domains, Part I  |
| 10:10 - 10:30 | Abe                 | Resolvent estimates for the Stokes equations in        |
|               |                     | spaces of bounded functions                            |
| 10:40 - 11:00 | Rapp                | Angle of bounded analyticity of the Stokes semi-       |
|               |                     | group on $L^\infty_\sigma$                             |
| 11:30 - 11:50 | Hsu                 | A Liouville theorem for the planer Navier-Stokes       |
|               |                     | equations with the no-slip boundary condition and      |
|               |                     | its application to a geometric regularity criterion    |
| 12:00 - 12:20 | Kato                | The global Cauchy problem for nonlinear dispersive     |
|               |                     | equations on modulation spaces                         |
| LUNCH         |                     |  |
| 15:30 - 16:30 | Kohlenbach          | Proof Mining in Nonlinear Analysis                     |
| 16:40 - 17:00 | Koutsoukou-Argyraki | Proof Theory and PDEs                                  |
| 17:20 - 17:40 | Schade              | Strong stability of 2D viscoelastic Poiseuille-type    |
|               |                     | flows, Part  |
| 17:50 - 18:10 | Sauer               | Strong stability of 2D viscoelastic Poiseuille-type    |
|               |                     | flows, Part II   |

### Thursday, 30th

| Time          | Speaker   | Title of Talk   |
|---------------|-----------|---|
| 09:00 - 10:00 | Titi      | GlobalWell-posedness of an Inviscid Three-dimensional           |
|               |           | Pseudo-Hasegawa-Mima-Charney-Obukhov Model,Part II              |
| 10:20 - 10:40 | Yokoyama  | Martingale Solutions for some Stochastic Euler Equations        |
| 10:50 - 11:10 | Steinberg | On the Computational Complexity of Poisson's Problem            |
| 11:30 - 12:30 | Monniaux  | Traces theorems for vector fields in special Lipschitz domains, |
|               |           | Part II   |

### Friday, 31st

| Time          | Speaker   | Title of Talk  |
|---------------|-----------|--|
| 09:00 - 09:20 | Ohnawa    | $L^1$ -stability of traveling waves in a radiating gas model |
| 09:30 - 09:50 | Fischer   | Shape Optimization with the Navier-Stokes-Equations          |
| 10:00 - 10:20 | Tsuda     | Time periodic problem of the the compressible Navier-Stokes  |
|               |           | equation   |
| 10:30 - 11:00 | von Below | Analysis of the Stokes equation in a layer domain            |