

# International School

## “Singularities, Blow-up and Non-Classical Problems in Nonlinear PDEs for youth”

### Program

(Moscow time, UTC+3)

#### November, 13, Wednesday

Connection link: [https://teams.microsoft.com/l/meetup-join/19%3ameeting\\_MWQ0ZGFIMDYtNzh1ZS00MzZkLWExMWQtN2M2MGZINTQ5ZWQ3%40thread.v2/0?context=%7b%22Tid%22%3a%22ae95c20-c675-4c48-88d3-f276b762bf52%22%2c%22Oid%22%3a%22c77ebb4b-5b0b-4aa8-b0f1-626029322c14%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MWQ0ZGFIMDYtNzh1ZS00MzZkLWExMWQtN2M2MGZINTQ5ZWQ3%40thread.v2/0?context=%7b%22Tid%22%3a%22ae95c20-c675-4c48-88d3-f276b762bf52%22%2c%22Oid%22%3a%22c77ebb4b-5b0b-4aa8-b0f1-626029322c14%22%7d)

- 11:00-12:00      **Prof. Laurent Véron**, *University of Tours, France*  
The singularity problems in nonlinear elliptic equations:  
history and progress. Lecture 1
- 12:15-13:15      **Prof. Juncheng Wei**, *Chinese University of Hong Kong,  
Hong Kong, China*  
Parabolic Gluing Methods and Type II Blow-up of Fujita  
Equation. Lecture 1
- 13:30-14:30      **Prof. Lijun Zhang**, *Zhejiang University of Science and  
Technology, China*  
Traveling wave solutions to nonlinear wave equations:  
dynamical system approach. Lecture 1

**November, 14, Thursday**

Connection link: [https://teams.microsoft.com/l/meetup-join/19%3ameeting\\_ZTRkMDExYjQtN2UyOS00MjY1LWlyNTgtMDY3N2EyYzI3ZjRj%40thread.v2/0?context=%7b%22Tid%22%3a%22ae95c20-c675-4c48-88d3-f276b762bf52%22%2c%22Oid%22%3a%22c77ebb4b-5b0b-4aa8-b0f1-626029322c14%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_ZTRkMDExYjQtN2UyOS00MjY1LWlyNTgtMDY3N2EyYzI3ZjRj%40thread.v2/0?context=%7b%22Tid%22%3a%22ae95c20-c675-4c48-88d3-f276b762bf52%22%2c%22Oid%22%3a%22c77ebb4b-5b0b-4aa8-b0f1-626029322c14%22%7d)

- 10:00-11:00      **Prof. Moshe Marcus**, *Technical University Technion, Israel*  
Boundary value problems for elliptic semi-linear equations with measure data
- 11:15-12:15     **Prof. Laurent Véron**, *University of Tours, France*  
The singularity problems in nonlinear elliptic equations: history and progress. Lecture 2
- 12:30-13:30     **Prof. Juncheng Wei**, *Chinese University of Hong Kong, Hong Kong, China*  
Parabolic Gluing Methods and Type II Blow-up of Fujita Equation. Lecture 2

**November, 15, Friday**

Connection link: [https://teams.microsoft.com/l/meetup-join/19%3ameeting\\_NDE3YjJlZDktMmVhMi00MDZjLWFlYmQtNGMyMjExYTlhMTc4%40thread.v2/0?context=%7b%22Tid%22%3a%22ae95c20-c675-4c48-88d3-f276b762bf52%22%2c%22Oid%22%3a%22c77ebb4b-5b0b-4aa8-b0f1-626029322c14%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_NDE3YjJlZDktMmVhMi00MDZjLWFlYmQtNGMyMjExYTlhMTc4%40thread.v2/0?context=%7b%22Tid%22%3a%22ae95c20-c675-4c48-88d3-f276b762bf52%22%2c%22Oid%22%3a%22c77ebb4b-5b0b-4aa8-b0f1-626029322c14%22%7d)

- 10:00-11:00      **Prof. Florica Cirstea**, *Sydney University, Australia*  
Singularities for nonlinear elliptic equations with singular potentials and gradient-dependent lower-order terms.  
Lecture 1
- 11:15-12:15      **Prof. Quoc Hung Nguyen**, *Chinese Academy of Sciences in Beijing, China*  
Well-posedness for local and nonlocal quasilinear evolution equations in fluids and geometry. Lecture 1
- 12:15-14:15      **Break time**
- 14:15-15:15      **Prof. Lijun Zhang**, *Zhejiang University of Science and Technology, China*  
Traveling wave solutions to nonlinear wave equations: dynamical system approach. Lecture 2
- 15:30-16:30      **Prof. Alessio Porretta**, *University of Rome Tor Vergata, Italy*  
Singularities and blow-up in viscous Hamilton-Jacobi equations. Lecture 1

## **November, 16, Saturday**

Connection link: [https://teams.microsoft.com/l/meetup-join/19%3ameeting\\_MDhmNzAwN2EtODbjMS00NTE3LWE2NWUtY2U5MTM1M2VmZDdh%40thread.v2/0?context=%7b%22Tid%22%3a%22ae95c20-c675-4c48-88d3-f276b762bf52%22%2c%22Oid%22%3a%22c77ebb4b-5b0b-4aa8-b0f1-626029322c14%22%7d](https://teams.microsoft.com/l/meetup-join/19%3ameeting_MDhmNzAwN2EtODbjMS00NTE3LWE2NWUtY2U5MTM1M2VmZDdh%40thread.v2/0?context=%7b%22Tid%22%3a%22ae95c20-c675-4c48-88d3-f276b762bf52%22%2c%22Oid%22%3a%22c77ebb4b-5b0b-4aa8-b0f1-626029322c14%22%7d)

- 10:00-11:00      **Prof. Florica Cirstea**, *Sydney University, Australia*  
Singularities for nonlinear elliptic equations with singular potentials and gradient-dependent lower-order terms.  
Lecture 2
- 11:15-12:15      **Prof. Quoc Hung Nguyen**, *Chinese Academy of Sciences in Beijing, China*  
Well-posedness for local and nonlocal quasilinear evolution equations in fluids and geometry. Lecture 2
- 12:30-13:30      **Prof. Alessio Porretta**, *University of Rome Tor Vergata, Italy*  
Singularities and blow-up in viscous Hamilton-Jacobi equations. Lecture 2