International School

"Singularities, Blow-up and Non-Classical Problems in Nonlinear PDEs for youth"

<u>Program</u>
(Moscow time, UTC+3)

<u>November, 13, Wednesday</u>

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**, *Shandong University of Science and Technology, China* Traveling wave solutions to nonlinear wave equations: dynamical system approach. Lecture 1

<u>November, 14, Thursday</u>

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. Juncheng Wei**, *Chinese University of Hong Kong, Hong Kong, China* Parabolic Gluing Methods and Type II Blow-up of Fujita Equation. Lecture 2
12:30-13:30	**Prof. Laurent Véron**, *University of Tours, France* The singularity problems in nonlinear elliptic equations: history and progress. Lecture 2

November, 15, Friday

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

14:15-15:15   **Prof. Lijun Zhang**, *Shandong 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

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