

Mathematical modelling in biomedicine

30.09-4.10.2019

Monday, September 30

8.30-10.00 Registration

10.00-10.30 Opening

Plenary lectures

10.30-11.15 F.I. Ataullakhanov. Mathematical problems of blood coagulation

11.20-12.05 A.V. Panfilov. Nonlinear waves and cardiac arrhythmias

12.30-14.00 Lunch

14.00-16.00 Parallel sessions: Cardiac modelling; Physiology and modelling

Coffee break

16.30-18.30 Parallel sessions: Cardiac modelling; Physiology and modelling

Tuesday, October 1

Plenary lectures

9.30-10.15 C. Dumontet. Immunotherapy: a paradigm-changing evolution in cancer therapy

10.20-11.05 F. Dell'Isola. On mechanically driven biological stimulus for bone remodeling as a diffusive phenomenon

Coffee break

11.30-12.30 Parallel sessions: Immunology; Cancer

12.30-14.00 Lunch

14.00-16.00 Parallel sessions Biomolecular modelling; Cancer

Coffee break

16.30-17.30 Parallel sessions: Biomolecular modelling; Cardiac modelling

17.30-18.30 Visit to the RUDN Medical faculty

Wednesday, October 2

Plenary lectures

9.30-10.15 P. Maini. Modelling collective cell migration in biology and medicine

10.20-11.05 W. Jaeger. Mathematical modelling and simulation for improved diagnosis and therapy of sepsis

Coffee break

11.30-12.30 Parallel sessions: Math. methods and analysis; Epidemiology

12.30-14.00 Lunch

Free afternoon

Thursday, October 3

Plenary lectures

9.30-10.15 W. Wieland. Stem cell-enriched lipoaspirate in regenerative medicine

10.20-11.05 Yu. Vassilevski. 3D hemodynamics in time-dependent domains: are fluid-structure interaction simulations inevitable?

Coffee break

11.30-12.30 Parallel sessions: Immunology; Epidemiology

12.30-14.00 Lunch

14.00-16.00 Parallel sessions: Immunology; Mathematical modelling and analysis

Coffee break

16.30-18.30 Parallel sessions: Immunology; Biological fluids

Friday, October 4

Plenary lectures

9.30-10.15 M. Adimy. Mathematical modelling of hematopoiesis

10.20-11.05 G. Bocharov. Mathematical modelling in immunology

Coffee break

11.30-12.30 Parallel sessions: Math. methods and analysis; Epidemiology

12.30-14.00 Lunch

14.00-16.00 Parallel sessions: Math. methods and analysis; Blood coagulation

Closing