Qualitative theory of systems of ordinary and partial differential equations

nnov.hse.ru/en/bipm/dsa/intpart

Research Unit of HSE University

International Laboratory of

Dynamical Systems and Applications

nnov.hse.ru/en/bipm/dsa



project leader **Olga Pochinka,**Head of Laboratory

Research Unit of Partner

School of Mathematical Sciences

Tongji University

math.tongji.edu.cn/home/mathen.htm

project leader

Bin Yu,Professor

China and Russia make science together

Olga Pochinka:

How did you come to the idea of a joint project?

It was a natural continuation of our partnership with the School of Mathematical Sciences of Tongji University. We have long-standing scientific ties with Chinese partners and have already ran several projects together. The field of hyperbolic and partially hyperbolic dynamical systems presents scientific interest for both parties.

How does this project differ from your previous cooperation?

We want it to give new impetus to the cooperation between the scientific schools, which differ in traditions and approaches. Relying on the experience of working in a new international team, we can broaden the range of scientific tasks. This time it will be the so-called hyperbolic dynamics. Using the dynamical systems theory, one can describe the behavior of system trajectories and their asymptotic direction. This information allows us to understand what physical processes can be modeled with the help of certain systems. The project has an educational value, too, as the majority of the lab staff are young promising mathematicians. We are also going to involve students in our research activities.



International Academic Cooperation, HSE University

Joint Basic Research Projects



SINCE 2023, A COMPETITION FOR JOINT FUNDAMENTAL RESEARCH PROJECTS HAS BEEN INITIATED.

The Competition shall be held among academic (research) structural subdivisions of HSE University planning to implement joint basic research projects with academic units of international universities and research centres engaged in research topics similar to the academic (research) subdivisions of HSE University.

Our goal:

- development of international scientific collaborations
- expansion of the research agenda and multidisciplinarity
- involvement of students in joint basic research projects to improve their culture of academic research



