



**COLLOQUIUM: 15 YEARS OF A FRENCH-RUSSIAN LAB**  
 CNRS – HSE – IITP– Skoltech – Steklov Institute

3-4 September 2018

*Independent University of Moscow / Center for Continuous Mathematical Education  
 Bolshoy Vlasyevskii, 11, Moscow*

Interdisciplinary Scientific Center Poncelet (**ISCP**) is an international scientific unit (CNRS UMI 2615). Its two main objectives are:

- to conduct joint research projects in the fields of basic and applied mathematics, theoretical physics and computer science;
- to become a showcase for this research, by promoting exchanges of knowledge between the main Russian and French scientific centers, through conferences, scholarships, stays and internships for young researchers.

**ISCP** supports free exchange of ideas, creative and friendly atmosphere, and big number of scientific events. Few lines of **ISCP** history:

- Founded in 2002 as a “**Laboratoire International Franco-Russe de Mathématique, Informatique et Physique**” (**LIFR MI<sup>2</sup>P**);
- Since 2006 – **Poncelet Lab** (after French Mathematician J.-V. Poncelet), prolonged in 2010 and in 2013;
- Since 2017 – **ISCP**, presently carries research in mathematical physics, mathematics and informatics (including bioinformatics).

We celebrate these 15 years together with our friends and colleagues and we use this opportunity to highlight the main joint scientific achievements and events. We plan to have at a two-day colloquium the “**historic day**” (3 September) and the “**scientific day**” (4 September).

List of expected participants from France	List of expected participants from Russia
Michel Balazard Pierre Cartier Jean-Stephane Dhersin Thomas Fernique Dimitri Gourevitch Marc Hindry Victor Kleptsyn Gregory Kucherov Laurent Lafforgue Philippe Lecheminant Aurelien Leynet Abdo Malac Alexis Michel Christian Peskine Vincent Rivasseau Alexander Shen David Sinnou (*) Denis Ullmo	<b>Members of Poncelet Center</b> Konstantin Anokhin Tagir Aushev Yulij Iyashenko Alexei Khokhlov Igor Krichever Alexander Kuleshov Tatiana Mironovskaya Armen Sergeev Vladimir Shevchenko Andrei Sobolevski Vladlen Timorin Dmitry Treschev Grigory Trubnikov Viktor Vasilyev Stanislav Smirnov (*) Anatoly Vershik Maria Yudkevich

(\*) – to be confirmed

**We would be happy to see friends, colleagues and guests.  
 Everyone is welcome!**

## Program of the colloquium

(Independent University of Moscow, Bolshoy Vlasievskii, 11, Hall 401)

### 1<sup>st</sup> day (Historic):

1. 10-00 – 10-30: *Arrival and breakfast*
2. 10-30 – 10-40: Alexey Khokhlov – Opening and foreword
3. 10-40 – 11-00: Alexey Sosinsky – History of French-Russian math. relations: from XVIII Century to our days
4. 11-00 – 11-40: Christian Peskine – History of creation of LIFR MIIP; Michael Tsfasman – From LIIFR MIIP to Poncelet
5. 11-40 – 12-00: *Coffee break and informal communication*
6. 12-00 – 12-15: Alexander Kuleshov – what we expect from Skoltech-Poncelet communication
7. 12-15 – 12-30: Yulij Ilyashenko – Moscow Independent University and Poncelet
8. 12-30 – 12-45: Dmitry Treschev – Steklov Institute and international collaboration
9. 12-45 – 14-45: *Lunch and informal communication*
10. 14-45 – 15-00: Vladlen Timorin – New projects of HSE math dep. and Poncelet
11. 15-00 – 15-15: Andrei Sobolevski – Current scientific communication of IITP and Poncelet
12. 15-15 – 15-45: Philippe Lecheminant (INP CNRS) – CNRS and Poncelet (phys), Jean-Stephane Dhersin (INSMI CNRS) – CNRS and Poncelet (math)
13. 15-45 – 16-15: Alexis Michel – Poncelet: communication with French Embassy, Abdo Malac – Poncelet in French-Russian modern relations, Aurelien Leynet – popularization of science
14. 16-15 – 16-45: *Coffee break*
15. 16-45 – 17-00: Irina Dezhina – Sociology of international scientific relation
16. 17-00 – 17-30: Thomas Fernique – Life at Poncelet: view from French side; Gleb Koshevoy – Life at Poncelet: view from Russian side; David Sinnou – Poncelet and CNRS: historic point of view
17. 17-30 – 17-45: Denis Ullmo – Current trends in French science on example of Pascal Institute
18. 17-45 – 18-00: Sergei Nechaev – Where we go, free discussion
19. 18-30 – 22-00: *Dinner (Independent University of Moscow, ground floor)*

### 2<sup>nd</sup> day (Scientific):

1. 09-30 – 10-00: Pierre Cartier, From Lagrange to Hamilton in calculus of variation
2. 10-00 – 10-30: Laurent Lafforgue, Grothendieck toposes and geometry: some questions they raise
3. 10-30 – 11-00: Marc Hindry, Zeta functions: origin, past and current development
4. 11-00 – 11-30: *Coffee break*
5. 11-30 – 12-00: Denis Ullmo, Schrödinger approach to mean-field games
6. 12-30 – 13-00: Alexander Shen, Three approaches to the quantitative definition of information
7. 13-00 – 13-30: Gregory Kucherov, Locality-sensitive hashing for bioinformatics
8. 13-30 – 15-00: *Lunch*
9. 15-00 – 15-30: Anatoly Vershik, Why so difficult (but ought) to pass from 2D to 3D combinatorics
10. 15-30 – 16-00: Alexandra Skripchenko, Combinatorics of billiard maps
11. 16-00 – 16-30: Victor Kleptsyn, Products of random  $SL(2, R)$  matrices: now with a parameter!
12. 16-30 – 17-00: *Coffee break*
13. 17-00 – 17-30: Alexander Gorsky, Surprises with Nekrasov partition function
14. 17-30 – 18-00: Vladimir Akouline, How to handle multipartite quantum entanglement
15. 18-00 – 20-00: *Wine & cheese at Poncelet*