

**Visit to the Spin Optics Laboratory, SPbSU
by the Members of Panel and experts of DFG (Germany) and Professors of TU Dortmund
26 October 2013**

The Panel Members and experts of the German funding agency DFG came to St. Petersburg to evaluate the International Cooperation project submitted by Prof. Manfred Bayer (Technical University of Dortmund). The project involves three German universities (Dortmund, Bochum and Paderborn), and, from the Russian side, Ioffe Physical-Technical institute and St. Petersburg State University. The Panel meeting took place at the Ioffe Institute on September 25, 2013. Before the meeting, DFG representatives as well as Professors Manfred Bayer and Frithjof Anders from Technical University of Dortmund (Germany) visited the laboratories of Prof. Yury Kusraev and Prof. Sergey Ivanov at the Ioffe institute.

The next day was devoted to the visit to the Spin Optics Laboratory (SOLAB) at the Peterhof campus of the Saint-Petersburg State University. SOLAB was founded in November 2011 in the framework of the megagrant of Professor Alexey Kavokin. In two years, the laboratory has succeeded in fully refurbishing the space allocated to it by the University and installing several high level experimental facilities including set-ups for CW differential optical spectroscopy, pump-probe femtosecond spectroscopy and spin-noise spectroscopy. Experiments with record-quality samples resulted already in multiple publications in the most prestigious international journals. The main focus of theoretical and experimental studies in SOLAB is on spin and polarization properties of semiconductor microcavities with embedded quantum wells and quantum dots. The laboratory actively collaborates with universities of Dortmund, Wurzburg, Montpellier, Paris VII, San Diego, Heraklion, Sheffield and Southampton. At the end of the Megagrant, SOLAB is one of the most rapidly developing research laboratories in Russia, already internationally well-known.

The German guests inspected the set-ups installed in SOLAB and discussed with young researchers their recent results. Then the guests visited two other modern laboratories, resource centers “Nanotechnology” and “Nanophotonics”, founded in the University in the framework of the Program of Development of the Saint-Petersburg and Moscow State universities. SOLAB extensively collaborates with these laboratories.



Fig. 1. Members of German delegation with staff and students of Spin Optics laboratory (SOLAB).



Fig. 2. Professor Manfred Bayer (with a cup) and members of SOLAB who worked in laboratory of Prof. Bayer in TU Dortmund in the period 2004 – 2013.

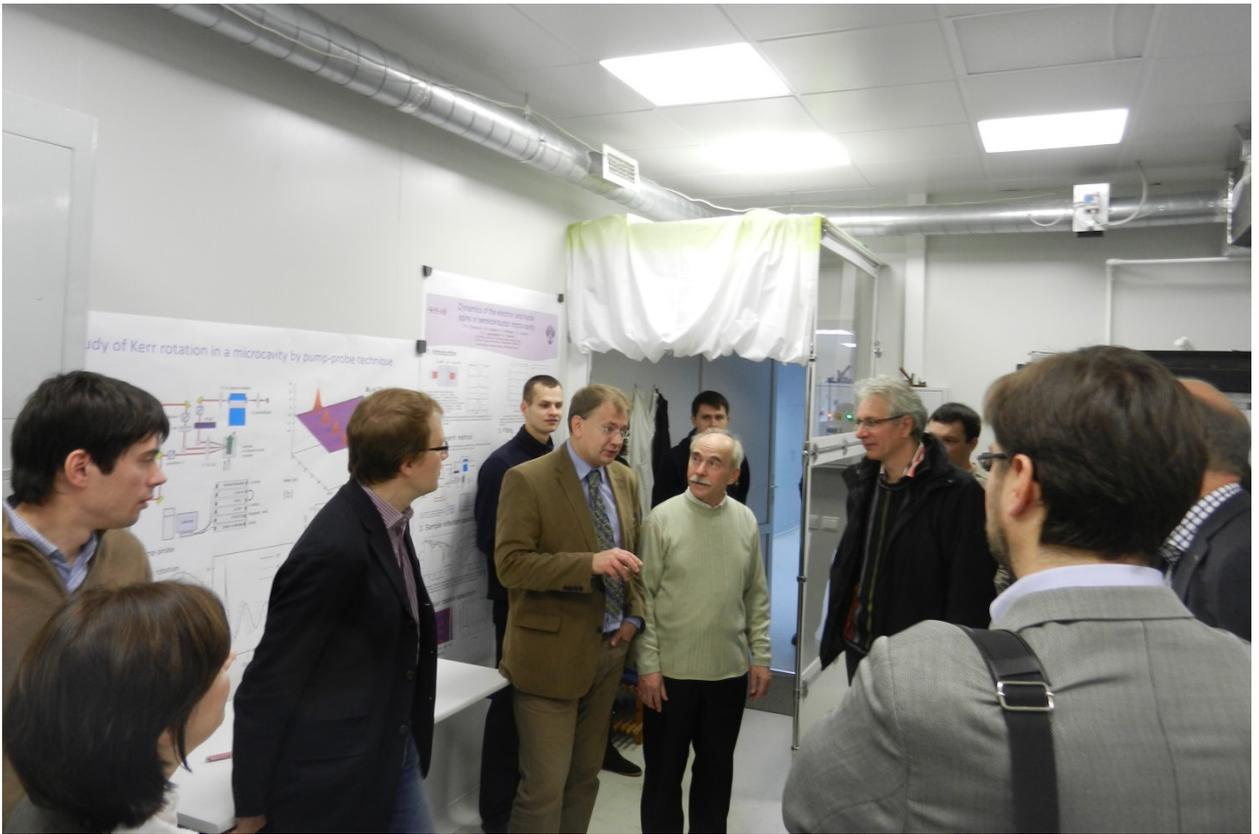


Fig. 3. Discussion in the femto-lab. Vice-dean, Nikolai Tsvetkov, talks to German scientists.

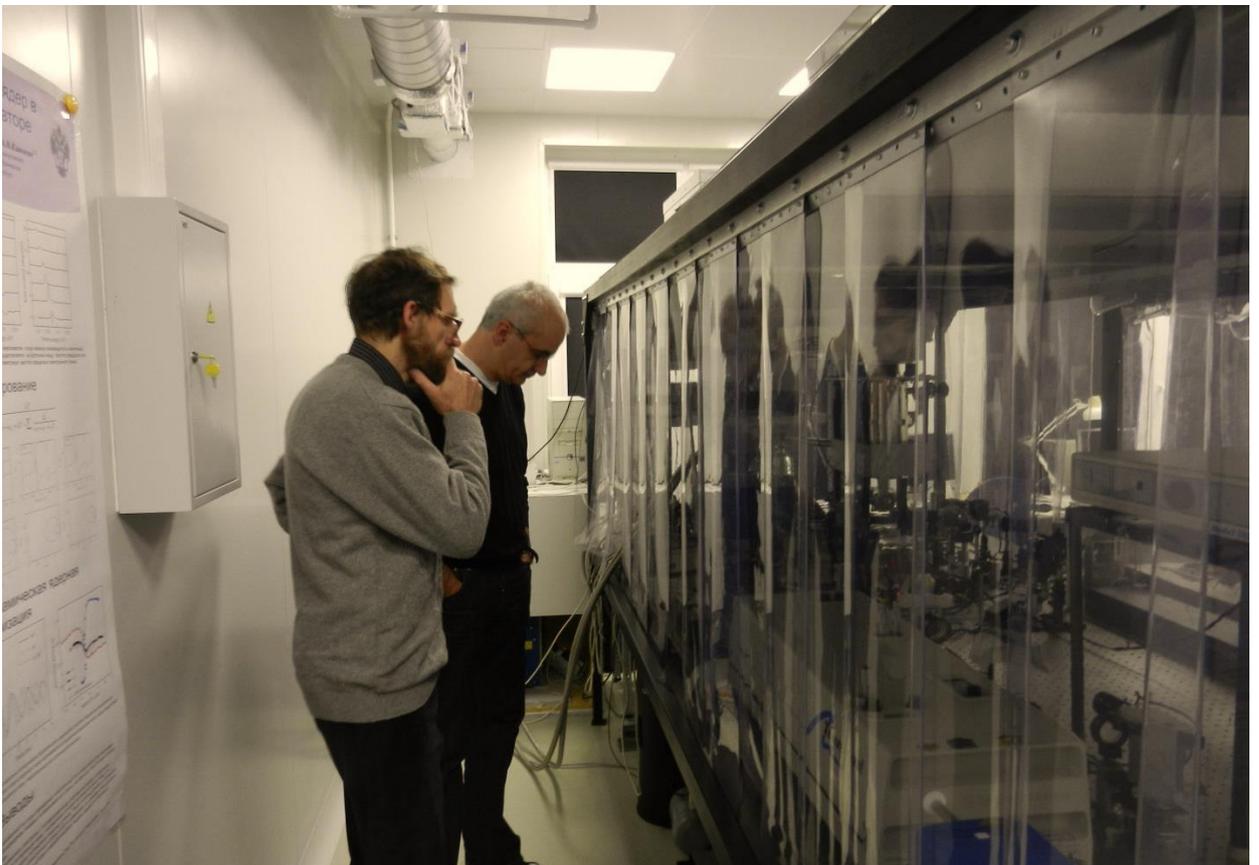


Fig. 4. Professor Manfred Bayer compares the pump-probe setup with similar setup in his lab.



Fig. 5. In the SOLAB corridors. Head of laboratory, Prof. Alexey Kavokin tells about new results.



Fig. 6. Near the spin-noise setup. Postdoc Sergey Poltavtsev explains the idea of the method.



Fig. 7. Director of the resource center “Nanophotonics” Vladimir Petrov explains the structure of the center.

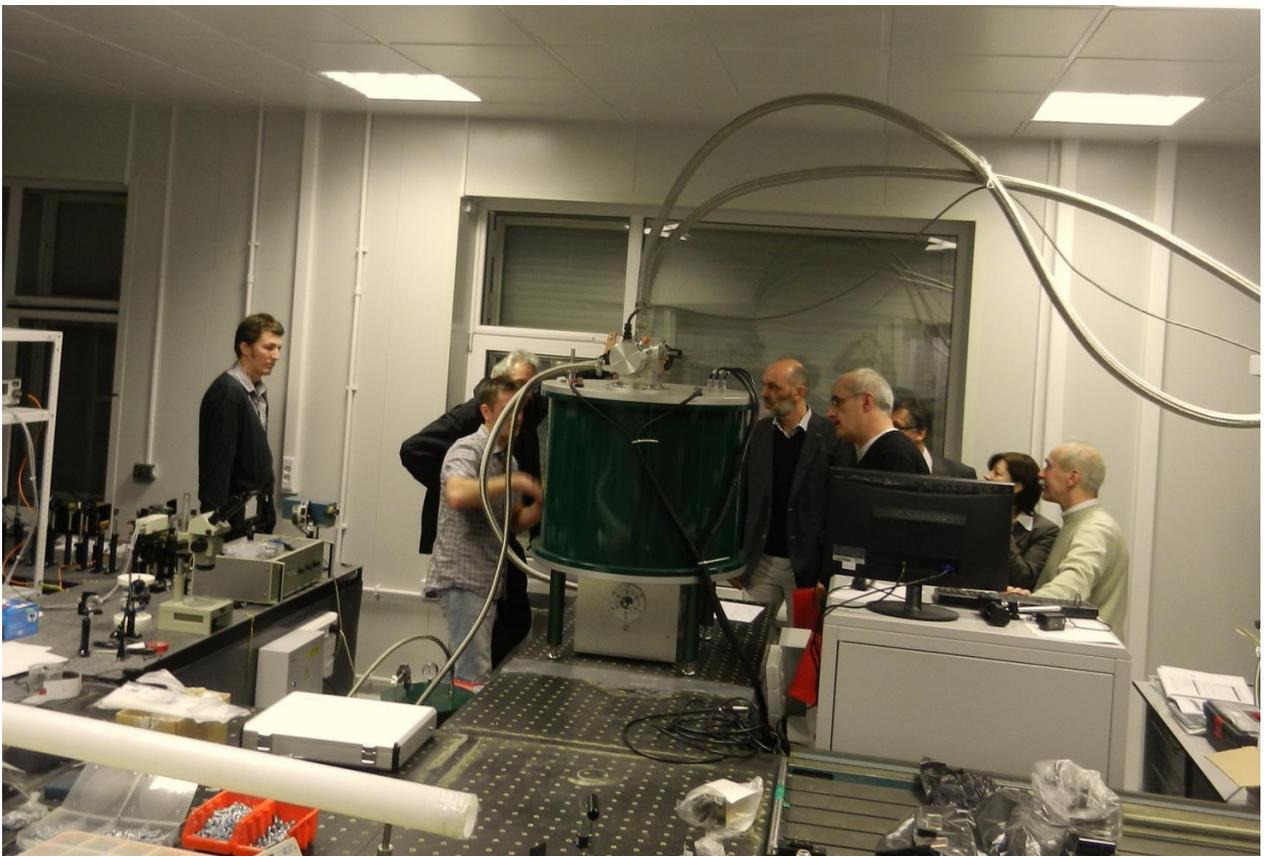


Fig. 8. Near the magnetic cryostat in the resource center “Nanophotonics”.



Fig. 9. In the resource center “Nanotechnology”. PhD student Anton Loshachenko explains the principle of He microscope.



Fig. 10. In the resource center “Nanotechnology”. Anton Loshachenko shows how to manipulate nanoobjects.



Fig. 11. Near the TEM “Libra 200” in the resource center “Nanotechnology”.



Fig. 12. Sightseeing. In the lower park of Petrodvorets.