## SibFU to organize an advanced mathematical research group

SibFU's mathematical research project 'Multi-dimesnsional complex analysis and differential equations' was supported by the Ministry of Education and Research. This research project will be carried out by an advanced research group.

Complex analysis research group from Krasnoyarsk has been internationally recognized for developing theoretical frameworks and applying them to signal processing, chemical kinetics, thermodynamics, and physics of elementary particles. The supervisor for the research will be the invited researcher Professor **Ari Laptev**. He is a distinguished researcher who works in the field of spectral theory of differential equations and complex analysis.

«We intend to continue developing the integral methods of complex analysis and study several basic problems in theoretical physics, bioinformatics. We also intend to study Gilbert problem and Navier-Stokes equations», — Professor August Tsikh, Head, Department of Function Theory at the Institute of Mathematics and Computer Science, SibFU, said.



He also said that megagrant would give SibFU's researchers an opportunity to strengthen their collaboration with European research centres.

«Our findings can be applied to processing genetic information and they are very important for developing various fields of theoretical physics, — Dr Alexey Shchuplev, Project Manager, said. — For example, Navier-Stokes equations are related to the problem of whirls (turbulence) in liquids and gases. Mathematical amoebas that have been studied in Krasnoyarsk for 15 years are related to the theory of algorhythms, thermodynamics and the physics of elementary particles».

The project will result in creating an advanced research group at Siberian Federal University. The group will study multi-dimensional complex analysis and it will strengthen the popularity of Krasnoyarsk research.

The three year grant is 40 million roubles. Siberian Federal University will also support the research with the funding of 10 million roubles.

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