

INTERNATIONAL WORKSHOP
**“MULTISCALE EXPERIMENTAL AND THEORETICAL STUDY OF HOMEOSTASIS AND
 MECHANOBIOLOGY OF TUMORS: RESULTS AND PROSPECTIVE”**
 DECEMBER 3, 2015

Conference is given in frames of the project **“Development of multiscale mechanobiology approaches for early diagnosis in oncology”** (contract C-26/614) that is carrying on by the International Research Group on the bases of Perm National Research Polytechnic University and Institute of Continuous Media Mechanics UB RAS and supported by Perm regional Government.

Coordinators: **Prof. Olga Gileva** (Perm National Research Polytechnic University)
Prof. Oleg Naimark (Institute of Continuous Media Mechanics UB RAS)

Languages: English, Russian

Location: Institute of Continuous Media Mechanics

Moderator: Prof. Oleg Naimark

Tuesday, December 3 (ICMM, 1 Korolev str., assembly hall, old building)	
9^{30} - 10^{00}	Registration
10^{00} - 10^{30}	Conference opening. Complimentary address of director of IMCC UB RAS, academician of Russian Academy of Sciences Valery Matveenko
10^{30} - 11^{00}	<i>The results of International Research Group project “Development of multiscale mechanobiology approaches for early diagnosis in oncology”</i> Olga Gileva , Perm National Research Polytechnic University A. Arneodo, O. Naimark, O. Orlov, A. Argoul, E. Gerasimova, M. Radmacher, Yu. Bayandin, E. Lyapunova, A. Nikityuk
11^{00} - 11^{45}	<i>Atomic force microscopy application in cancer diagnosis</i> Manfred Radmacher , University of Bremen
11^{45} - 12^{30}	<i>Multiscale modeling of living systems: some clues to investigate cancer progression</i> Annick Lesne , Université Pierre et Marie Curie
12^{30} - 13^{30}	Lunch
13^{30} - 14^{10}	<i>Wavelet-based multifractal analysis of dynamic IR thermograms and X-ray mammograms to assist in early breast cancer diagnosis</i> Alain Arneodo, École Normale Supérieure de Lyon Françoise Argoul, École Normale Supérieure de Lyon Evgeniya Gerasimova , Institute of Continuous Media Mechanics
14^{10} - 14^{30}	<i>Prevalence, diagnosis and principles of treatment of breast cancer in the Perm region</i> Oleg Orlov, Perm State Medical University named after ac. E.A. Wagner, Perm regional oncological dispensary Tatiana Libik , Perm State Medical University named after ac. E.A. Wagner, Perm regional oncological dispensary
14^{30} - 14^{50}	<i>Atomic force microscopy of living cells: physico-mechanical properties for cell type differentiation</i> Elena Lyapunova , Institute of Continuous Media Mechanics
14^{50} - 15^{10}	<i>Wavelet-based multifractal analysis of coherent phase microscopy data of cancer and normal cells</i> Alexandr Nikityuk , Institute of Continuous Media Mechanics
15^{10} - 15^{30}	Coffee break
15^{30} - 16^{30}	Discussion of the results and future prospective