



The Abdus Salam

# International Centre for Theoretical Physics

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IAEA  
International Atomic Energy Agency

## Conference on Genome Architecture in Space and Time

**20 - 24 June 2016**  
(Miramare - Trieste, Italy)

The Abdus Salam International Centre for Theoretical Physics (ICTP), Trieste, Italy, will organize a Conference on Genome Architecture in Space and Time from **20 - 24 June 2016**. The Conference will be co-sponsored by SISSA.

The life of any cell is based upon the information coded by the linear filament of its DNA and how this information is processed is profoundly influenced by the spatial and dynamic folding of DNA sequence in the crowded environment of the nucleus of the cell (for eukaryotes) or the nucleoid (for prokaryotes). In particular the determinants of folding influence how genomes tend "to react" to external stimuli, especially when the healthy behavior of the cell is harmed by internal and/or external factors which may cause the death of the cell or of the entire organism.

The structure/function relationship of genomes (from bacteria to higher eukaryotes including humans) is the focus of an intense multi-disciplinary effort, where experimental teams (super-resolution microscopy, chromosome conformation capture, in-vivo fluorescence imaging, ...) work side-by-side of theoretical ones (physical/mathematical models for the genomes, statistical analysis of gene expression profiles, bioinformatics analysis of DNA sequences,...), with the mutual greatest benefit.

The main goal of the Conference is to discuss the state-of-the-art of this exciting, interdisciplinary and rapidly growing research area presented by internationally recognized [speakers](#) coming from a broad range of disciplines. *A poster session is foreseen. The best 4 - 5 posters will be selected for short (~15 minutes) oral presentations.*

### LIST OF SPEAKERS

Benjamin Audit - Ecole Normale Supérieure de Lyon (France)  
Gerd A. Blobel - Perelman School of Medicine, University of Pennsylvania (USA)  
Cristina Cardoso - Technische Universität Darmstadt (Germany)  
Peter R. Cook - Oxford University (UK)  
Christoph Cremer - *Institute of Molecular Biology, Mainz (Germany)*  
Thomas Cremer - *Ludwig Maximilians Universität, München (Germany)*  
Josee Dostie - *McGill University, Montreal (Canada)*  
Denis Duboule - *Ecole Polytechnique Fédérale de Lausanne (Switzerland)*  
Olga Dudko - *Department of Physics, University of California at San Diego (USA)*  
Luca Giorgetti - *Friedrich Miescher Institut, Basel (Switzerland)*  
Alexander Y. Grosberg - *New York University (USA)*  
Pietro Liò - *Cambridge University (UK)*  
Maria Manosas - *Barcelona University (Spain) and ABCD Biophysics Lab Paris (France)*  
Musa Mhlanga - *CSIR Biosciences, Pretoria (South Africa)*  
Tom Misteli - *National Cancer Institute, Bethesda (USA)*  
Sergei Nechaev - *CNRS-Université Paris-Sud (France)*  
Henri Orland - *Institut de Physique Théorique, CEA-Saclay (France)*  
Colin Semple - *Medical Research Council, Human Genetics Units, Edinburgh (UK)*  
Thomas Sexton - *Institut de Génétique et de Biologie Moléculaire et Cellulaire, Illkirch (France)*  
Irina Solovei - *Ludwig Maximilians Universität, München (Germany)*  
François Spitz - *EMBL, Heidelberg (Germany)*  
Andrzej Stasiak - *Center for Integrative Genomics, Université de Lausanne (Switzerland)*  
Amos Tanay - *Weizmann Institute, Rehovot (Israel)*  
Bas van Steensel - *Division of Gene Regulation, Netherlands Cancer Institute, Amsterdam (The Netherlands)*  
Jean-Marc Victor - *Laboratoire de Physique Théorique de la Matière Condensée, Université PMC, Paris (France)*  
Torsten Waldminghaus - *SYNMIKRO, Philipps-Universität Marburg (Germany)*

### PARTICIPATION

Scientists and students from all countries which are members of the United Nations, UNESCO or IAEA may attend the Workshop. As it will be conducted in English, participants should have an adequate working knowledge of that language. Although the main purpose of the Centre is to help research workers from developing countries, students and research scientists from all countries are warmly welcome to attend. As a rule, travel and subsistence expenses of the participants should be borne by the home institution. Every effort should be made by candidates to secure support for their fare (or at least half-fare). However, limited funds are available for some participants who are nationals of, and working in, a developing country, and who are not more than 45 years old. Such support is available only for those who attend the entire activity. There is no registration fee.

There is no workshop registration fee. As a rule, travel and subsistence expenses of the participants should be borne by the home institutions. However, participants who are nationals of and working in a developing country and who are not more than 45 years old, will be considered, upon request, for some subsistence support and for travel support up to one-half the cost of international airfare. Such support is available only for those who attend the entire activity.

### HOW TO APPLY FOR PARTICIPATION

The application form can be accessed at the activity website <http://indico.ictp.it/event/7660/>. Once in the website, comprehensive instructions will guide you step-by-step, on how to fill out and submit the application form. Closing date for receipt of the applications is: **28 February 2016**.

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E-mail: [smr2878@ictp.it](mailto:smr2878@ictp.it) ICTP Home Page: <http://www.ictp.it>



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### LOCAL ORGANIZER

**Matteo Marsili**  
ICTP, Trieste, Italy

**DEADLINE**  
*For requesting participation:*

**28 February 2016**

