

In collaboration with  
*ISI Foundation*

Under the aegis of:  
*Ministry for Reform and Innovation in Public Administration*  
*Polytechnic Institute of Turin*  
*University of Turin*  
*University of Eastern Piedmont*  
*Piedmont Region*  
*Province of Turin*  
*City of Turin*  
*Science Academy of Turin*  
*Union of Italian Scientific Journalists*

**Convention**  
**“UNDERSTANDING COMPLEXITY: A JOURNEY THROUGH SCIENCE”**  
**November 22-23, 2007**  
**Turin, Lingotto Conference Center**

**Thursday November 22**

**9.00 Registration of participants**

**9.30 Welcoming remarks of the authorities**

*Francesco Brizio, President of CSI-Piemonte*

*Francesco Profumo, Chancellor of the Polytechnic Institute of Turin*

**Opening address**

*Agata Spaziante, Polytechnic Institute of Turin – Technical-Scientific Committee of CSI-Piemonte*

**10.00 Complexity: method, paradigms, prospects**

*Mario Rasetti, Polytechnic Institute of Turin - ISI Foundation*

**10.45 Would-be worlds: toward a theory of complex systems**

*John L. Casti, International Institute for Applied Systems Analysis of Laxenburg*

11.15 *Coffee Break*

**11.30 Natural systems**

*Coordinator Piero Bianucci, scientific journalist*

From molecular biology to system biology: a necessity to understand the mechanisms of life

*Federico Bussolino, University of Turin*

Understanding and protecting biodiversity and ecosystems

*Marino Gatto, Polytechnic Institute of Milan*

Cities and complexity: from conception to modelling

*Denise Pumain, Université Paris 1 Panthéon-Sorbonne – Institut Universitaire de France*

13.15 *Buffet*

14. 30 Complexity and predictability of the spread of epidemics  
*Alessandro Vespignani, Indiana University of Bloomington – ISI Foundation*

**15.0 Technological systems**

*Coordinator Gianfranco Balbo, University of Turin – Technical-Scientific Committee of CSI-Piemonte*

Information dynamics in on line social communities  
*Vittorio Loreto, University of Rome “La Sapienza” – ISI Foundation*

The emergence of phase transitions in learning  
*Lorenza Saitta, University of Eastern Piedmont “A. Avogadro”*

Robots evolution among biology and engineering  
*Dario Floreano, École Polytechnique Fédérale de Lausanne*

**17.00 Closing remarks**

**Friday November 23**

**9.00 Registration of participants**

**9.30 Complexity: applications**

*Pietro Terna, University of Turin – Lagrange Project Technical Committee*

**10.00 Social systems**

*Coordinator Roberto Marchionatti, University of Turin – Technical-Scientific Committee of CSI-Piemonte*

A superficial science  
*Domenico Parisi, CNR Rome*

Computational approaches to understanding social complexity  
*Claudio Cioffi-Revilla, George Mason University of Fairfax*

*11.00 Coffee break*

The physics of the city: mobility of citizens and urban complexity  
*Bruno Giorgini e Sandro Rambaldi, Università degli Studi di Bologna*

How one thing leads to another: a complexity perspective on innovation  
*David Lane, Università degli Studi di Modena e Reggio Emilia – Santa Fe Institute*

Economic Growth is Driven by Localized Knowledge Centers  
*Sorin Solomon, The Hebrew University of Jerusalem – ISI Foundation*

**13.00 Closing remarks**

*Agata Spaziante, Polytechnic Institute of Turin - Technical-Scientific Committee of CSI-Piemonte*

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