

Mathematics and Industry

Mathematics provides a universal framework for innovation, which is vital for society and industry. However, the interaction between mathematics and industry is far from optimal. Consequently, a strong inter-connected community and a vision for Europe are needed more than ever.



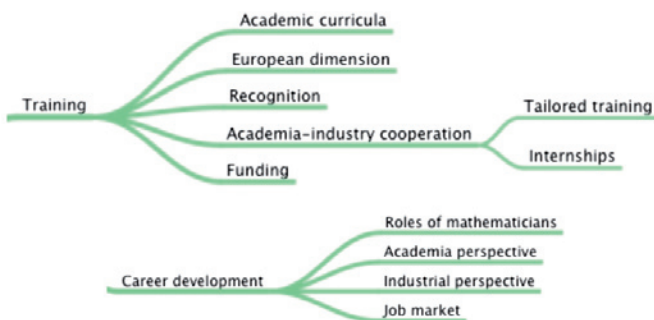
The goal of the Forward Look 'Mathematics and Industry' is to explore ways of stimulating and/or intensifying the collaboration between Mathematics and Industry. It will enable Europe's scientific community, in interaction with policy makers, to develop medium- to long-term views and analyses of future research activities with the aim of defining research agendas at national and European level. It is expected that it will impact society by strengthening the mathematical knowledge base of a wide spectrum of research-intensive industries.

Working Group 1: Training, Jobs and Careers

Coordinator: Magnus Fontes (member of the ECMI Council and chairman of its Educational Committee)

Deliverables:

- Recommendations for stronger European connections in national educational systems
- Best practices in Education in Industrial Mathematics
- Increasing its awareness as a discipline
- Best practices in Academia-Industry collaborations in Education

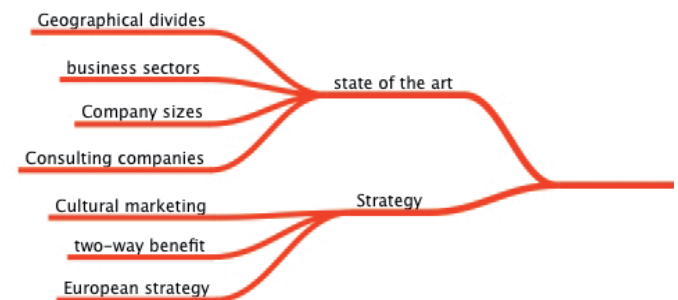


Working Group 2: Academia-Industry Interface

Coordinator: Volker Mehrmann (Vice-chair of the EMS Applied Mathematics Committee, Chair of Matheon)

Deliverables:

- Recommendations for stronger Academia-Industry interface
- Survey of existing collaborations and needs
- Interviews with consulting companies
- Development of national strategies and a European Strategy



Working Group 3: Opportunities and Challenges

Coordinator: Yvon Maday (President of the scientific council of SMAI and manager of the industrial relations of the Fondation Sciences Mathématiques de Paris)

Deliverables:

- Recommendations on new opportunities for Europe
- Report on challenges for SMEs and large companies and opportunities to build a European Community in this field
- Identification of strategic opportunities



Organising Committee

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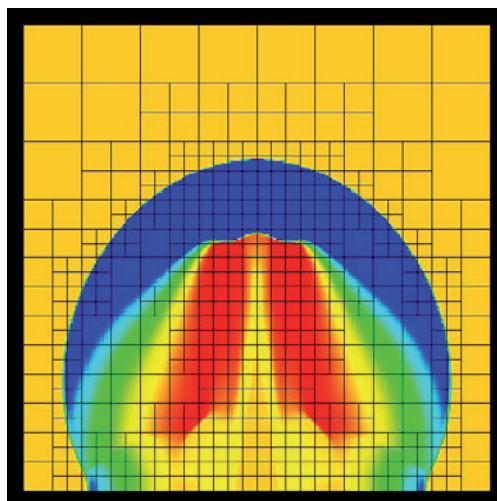
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For the latest information on this Forward Look
consult the following websites:

www.esf.org/mathematics

www.ceremade.dauphine.fr/FLMI



List of activities

- **Kick-off Meeting**
CNR, Rome, 16-17 April 2009
- **Workshop of WG1**
Lund, 30 May 2009
- **Workshop of WG2**
Berlin, 10 June 2009
- **Workshop of WG1 and WG3**
Berlin, 15 June 2009
- **Workshop of WG1**
Wroclaw, 27-30 August 2009
- **Workshop of WG1**
Dresden, 10 September 2009
- **Workshop of WG3**
Paris, 23 October 2009
- **Alignment Workshop**
ESF, Strasbourg, 16-17 November 2009
- **Consensus Conference**
Spanish EU Presidency 2010
Madrid, 26-27 April 2010
- **Final Conference**
Belgian EU Presidency Autumn 2010

ESF Forward Looks

ESF Forward Looks provide medium to long-term authoritative visions on science perspectives in broad areas of research bringing together ESF Member Organisations, other research organisations and the scientific community in creative interaction. Forward Look reports and other outputs such as ESF Science Policy Briefings assist policy makers and researchers in defining optimal research agendas and in setting priorities. Quality assurance mechanisms, based on peer review where appropriate, are applied at every stage of the development and delivery of a Forward Look to ensure its credibility and impact.

www.esf.org/flooks

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