Report of the Program Committee
ICM 2006

Program Committee (PC) members:

Noga Alon (Chair), Douglas Arnold, Joaquim Bruna, Kenji Fukaya, Vaughan Jones, Nigel Hitchin, Pierre-Louis Lions, Gregory Margulis, Richard Taylor, Srinivasa Varadhan, Claire Voisin, Enrique Zuazua

Outline of work (more details later)**:**

- April 2003: Appointment of PC
- May-Sep. 2003: Electronic discussion on structure of ICM, panel chairs and cores
- Oct. 2003: First meeting of PC, Princeton, NJ.
- Dec. 2003: Invitations to panel chairs sent
- Jan. 2004: Invitations to panel cores sent
- May 2004: Panel cores finish selecting the rest of their panels
- Jan. 2005: Panels (and local program committee) send suggestions for section speakers and possible plenary speakers (more suggestions received from individuals and societies)

- Jan.-March 2005: Email discussion
- March 2005: Second, final meeting of PC in Madrid: choice of speakers, meeting with EC of ICM, visit of venue.
- March-May 2005: Final refinement of list of speakers
- May 2005: Invitations to speakers sent by Local Organizing Committee
- August 2005: All but 3 invited speakers accepted, invitations to 3 alternates sent
- Sep. 2005: Lists of speakers posted at the website of ICM.

Structure of ICM 2006:

- 20 Plenary lectures
- 20 sections (with an updated description of each, and a suggested approximate number of lectures in each (that can be modified based on suggestions of panels, local program committee and desire to achieve a better geographic and gender balance))

Also (handled by Local Program Committee):
- Short communications
- Poster sessions
- Mathematical Software
- Special activities

List of sections and number of lectures in each:

1. Logic and Foundations (5)
2. Algebra (7)
3. Number Theory (10)
4. Algebraic and Complex Geometry (9)
5. Geometry (13)
6. Topology (8)
7. Lie Groups and Lie Algebras (12)
8. Analysis (8)
9. Operator Algebras and Functional Analysis (6)
10. Ordinary Differential Equations and Dynamical Systems (11)

11. Partial Differential Equations (11)
12. Mathematical Physics (11)
13. Probability and Statistics (13)
14. Combinatorics (9)
15. Mathematical Aspects of Computer Science (7)
16. Numerical Analysis and Scientific Computing (7)
17. Control Theory and Optimization (7)
18. Applications of Mathematics in the Sciences (9)
19. Mathematical Education and Popularization of Mathematics (3+3 panel discussions)
20. History of Mathematics (3)

Some statistics:

20 plenary lectures,
169 invited section lectures,
Speakers from 24 countries

Women: 1 plenary+ 12 invited

Comments and suggestions (more in full report):

- Publish procedure of selection
- Geographic and gender balance
- Discussions between chairs of different panels
- Contacting ICMI concerning section 19 and ICHM concerning section 20.
- Prepare a database of past speakers, past panel members and past PC members
- Panels and PC should consist mostly of previous ICM speakers. While it is desirable to have new generations of mathematicians serve, too stringent rules about the composition of panels may compromise scientific quality
- Broad coverage of areas is essential.

From a typical letter from early 2006 (names omitted):

``…
Having completed my elementary proof of the Riemann Hypothesis, I would like to request you to kindly consider adding a plenary lecture in which I will be able to present my work, and possibly also An ad-hoc session during the ICM to discuss its impact
…''