

MATHEMATICS OF PLANET EARTH



MPE 2013 Fact Sheet

A world-wide initiative to bring awareness to global issues and the role that mathematics can play in their solution.

Web Address: www.mpe2013.org

Initiator: Christiane Rousseau, *University of Montreal*

Goals:

- Highlight the contributions made by mathematics in tackling global problems
- Increase public engagement with mathematics
- Bring together world-class researchers in mathematics and other fields to solve some of the world's most challenging problems.

Endorsed by:

United Nations Scientific, Educational, and Cultural Organization (UNESCO)
International Mathematical Union (IMU)
International Council for Industrial and Applied Mathematics (ICIAM)

Recognized in the U.S. Congress:

Speech by Congressman Jerry McNerney on November 16, 2012 <http://thomas.loc.gov/cgi-bin/query/z?r112:H16NO2-0011:/>

Partners: More than 100 organizations in more than 30 countries including:

42 Mathematics Institutes
30 Professional Societies
13 Research Centers
6 Teacher Associations
5 International Organizations

Activities:

Official launches in 4 continents
7 long-term (more than one month) programs at research institutes
10 keynote addresses
20 special sessions at Society meetings
50 week-long research workshops
5 summer schools
2 public lecture series and more public lectures
2 workshops for developing educational materials
An international museum module competition

Media:

Research Articles
Expository Articles
Videos
Books
Classroom materials
Mathematical magazines for the schools

Exhibits:

Open Source Exhibition hosted at Oberwolfach through the Imaginary project to be
launched at UNESCO on March 5-8, 2013
Traveling exhibition produced in France

Themes for national outreach campaign:

Math Awareness Month topic in the US in April 2013:
"The mathematics of sustainability" <http://www.mathaware.org/>
Week of mathematics on MPE organized by the French Ministry of Education

Blogs:

Daily blog on the MPE2013 website
Weekly blog in Australia
Daily blog in France

Four themes:

- A planet to discover
(*geophysics, oceans, meteorology and climate, planetary motions, etc.*)
- A planet supporting life
(*ecology, biodiversity, evolution, etc.*)
- A planet organized by humans
(*economic & financial systems, energy, health & social systems, resource management, etc.*)
- A planet at risk
(*climate change, sustainability, natural disasters, epidemics, etc.*)