

NSF Funding Opportunities in Mathematical Geosciences

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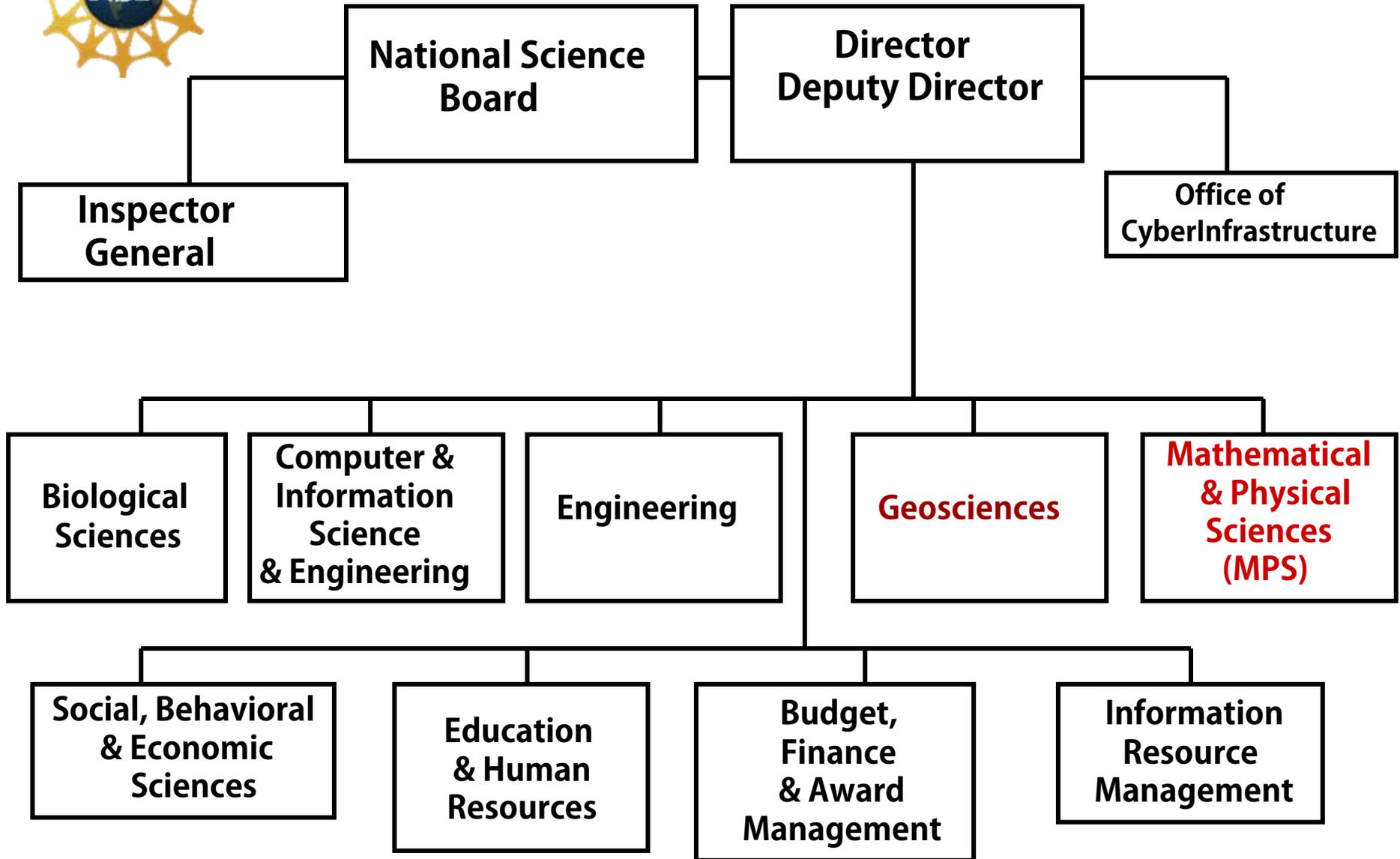
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National Science Foundation



NSF investment priorities

Promote transformational, multidisciplinary research

Investigate the human and social dimensions of knowledge and technology

Further U.S. economic competitiveness

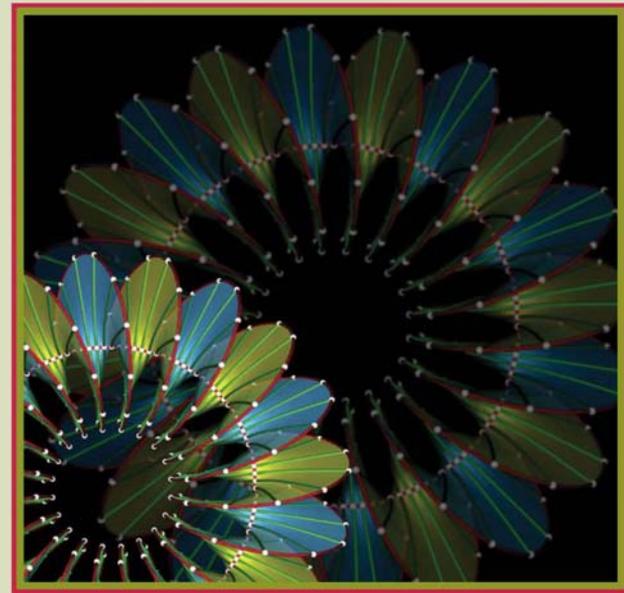
Foster research that improves our ability to live sustainably on Earth

Advance fundamental research in computational science and engineering, and in fundamental, applied and interdisciplinary mathematics and statistics



National Science Foundation

INVESTING IN AMERICA'S FUTURE

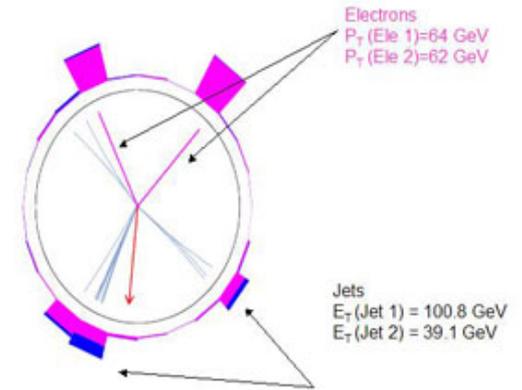


STRATEGIC PLAN

FY 2006-2011

Cyber-enabled Discovery and Innovation (CDI)

- NSF-wide investment (\$52M)
 - MPS investment (\$10M)
- Focus areas
 - Complex interactions
 - Computational experimentation
 - Knowledge extraction
 - Virtual organizations
 - Educating researchers and students in computational discovery



Simulation of Elementary Particle Collision.
Credit: Ashutosh Kotwal, Duke University.

Finding an event in a lot of noise requires modeling to predict what we should see and comparison with data obtained, requiring cyber-enabled capabilities.

PetaApps II

- Under discussion for second phase of PetaApps
 - » Main strengths?
 - » What aspects of PetaScale Computing were not addressed in PetaApps I?
 - » What new directions you would like to see in PetaApps II?
 - » Other comments?

CMG Today

- No formal program solicitation in FY2008
- But Geo and DMS are co-funding CMG-like projects in FY2008
- CMG future is undetermined, but a decision will be made by October 2008

CMG: Yesterday & Tomorrow

- Yesterday
 - » Your assessment and comments on CMG yesterday
- Tomorrow
 - » Should CMG continue?
 - » If yes, what would be the focus areas?
 - What do you want to see the most in future CMG?
 - What would you not like to see in future CMG?