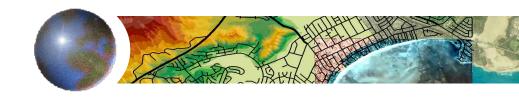# *4421. What are the Grand Challenges of Geographic Information Science?*

Co-sponsored by GI Systems & Science, Cyberinfrastructure, Spatial Analysis & Modeling

What are Grand Challenges?

- are extremely hard to do, yet are do-able

- produce outcomes potentially affecting millions, if not hundreds of millions of people

- require multiple research projects across many subdisciplines in order to be satisfactorily addressed

- consist of well-defined metrics such that, through creativity and commitment, can be realistically met and one knows the end has been reached

- capture the popular imagination, and thus political support

"Grand Challenges"
National Academy of Engineering

- Make solar energy affordable
- Engineer better medicines
- Prevent nuclear terror

- Provide access to clean water everywhere
- Secure cyberspace
- Reverse-engineer the brain!

Panelists

- Tim Nyerges, University of Washington

- May Yuan, University of Oklahoma

- Peggy Agouris, George Mason

- Ted Cope, NGA

- Jerry Johnston, EPA