

# Outreach Programs for the Public

Neutrinos and Society Subgroup  
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# Outline

- Rationale and Importance of Public Outreach
- Interesting Example
- How would one structure an outreach program around Neutrinos?
- How would one implement it?

# Outreach... Why?

- WE NEED PUBLIC SUPPORT!
- Taxpayer money funds our work!
  - Obligation to justify, show value for their investment
- Our field has a LOT of exciting developments,
  - Our challenge: convey our excitement to the Public, and Congress;
  - AND particularly students!

# Example: CERN's response to Angels and Demons

- Provide template for public talks
- Organize network of speakers
- Orchestrate series of talks coordinated with release of blockbuster movie



ANGELS & DEMONS™  
*Lecture Night*  
THE SCIENCE REVEALED

# Antimatter

in Film & in Science

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# Could such a model be applicable in our Neutrino community?

- Nothing quite as time-critical as a film release
- We're not a single Laboratory, and neutrinos aren't the Higgs Boson – we have a more diverse set of groups and physics goals
- These give us a lot of fascinating things to talk about!
  - Large, sophisticated, and... very photogenic detectors
    - IceCube, SuperK, Borexino, SNO, ...
  - Almost unbelievably large-scale experiments
    - 1000 km baselines
  - Interesting results!
    - Supraluminal neutrinos... (well...)

# And... what we've learned about neutrinos

- The “undetectable” (Pauli) particle CAN be seen
- Oscillations
  - Particles morphing into other particles
    - Counterintuitive, and ... fascinating to think about (just try to explain it so your grandmother can understand it!)
- Astrophysics
  - Supernova neutrinos – seen
  - Astronomical point sources – still looking
- Nonproliferation and Arms Control
  - Antineutrinos have the potential to benefit international nuclear monitoring and control of nuclear material
- Bottom line: Neutrinos can be “stars” in public lectures

# What's needed: thoughts and suggestions

- Resources
  - Collections of talks, slides, graphic material
    - Audience: potential students, Congress, general public
  - Centralized “library” or server?
    - Who manages?
- Structure
  - Build on and perhaps broaden existing outreach activities
  - Community clearing house
    - E.g. APS’s Centennial lecture series
      - Pool of lecturers available to respond to requests for talks

# Concrete Suggestions

- Reports being generated at these preparatory Workshops should address Outreach needs
- Further thoughts and suggestions should be solicited and collected
  - I'm willing to work on this