



# CSS 2013 "CE&O" Study Group

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#### **CE&O** Main Message

# Communication, education and public outreach to a variety of audiences are essential to the future of our field.



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- I. To ensure that the U.S. particle physics community has the resources necessary to conduct research and maintain a world leadership role.
- 2. To ensure that the U.S. public appreciates the value and excitement of particle physics.
- 3. To ensure that a talented and diverse group of students enter particle physics and other STEM careers, including science teaching.





### **CE&O** Themes across Audiences

Opinion Leaders - Policy Makers - General Public - Educators - Students

Increase efforts to make a *coherent* case—the compelling questions, our facility needs and the value of particle physics to society—by:

- Mobilizing a greater fraction of our community for CE&O activities.
- Providing increased access to resources, training activities & opportunities.
- Recognizing individuals who engage in CE&O efforts.





### CE&O Recommendations

To lower barriers for participation and increase the quality and effectiveness of existing and new efforts:

Augment existing particle physics communication efforts with additional personnel and resources dedicated to nationwide coordination, training and support.

Develop a central, comprehensive communication, education and outreach website.

Commit to convey consistent, coherent and compelling messages about the importance of particle physics research and its value to society.

Recognize within our community that CE&O activities are critical to the success and health of our field and require time, effort and funding.



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# **CE&O** Recommendations

Nationwide coordination, training and support:

- A central, comprehensive communication, education and outreach office to enable more physicists to do CE&O
- Materials designed to inform the public about the value of particle physics research to society
- Sustainable methods to collect statistics on workforce development and technology transfer
- Professional development opportunities for educators
- New learning opportunities for students of all ages

# A Vision for CE&O



P5 formally recognizes the importance of CE&O, including funding for resources to provide national coordination and support.

The engagement of particle physics researchers in CE&O is recognized with equal importance as their engagement in research.

CE&O is an integral part of our research program.

The majority of physicists, engineers, computer scientists and technicians engage in CE&O.