



Elementary Particle Physics View



Chinese American Networking Symposium (CANS 2004)

Toward Next Generation Advanced Networks

What we want to do: Elementary Particle Physics View

**Empowering University Participation in
Large Science Projects.**

**Revolutionizing the way Global Science is
done through advanced cyberinfrastructure.**

**A basis for restructuring the integration of
research and education**

- **Bringing advanced cyberinfrastructure to
the classroom by using distributed
infrastructure supported for long times by
Research Programs.**

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NSB National Science Board

Office of Inspector General

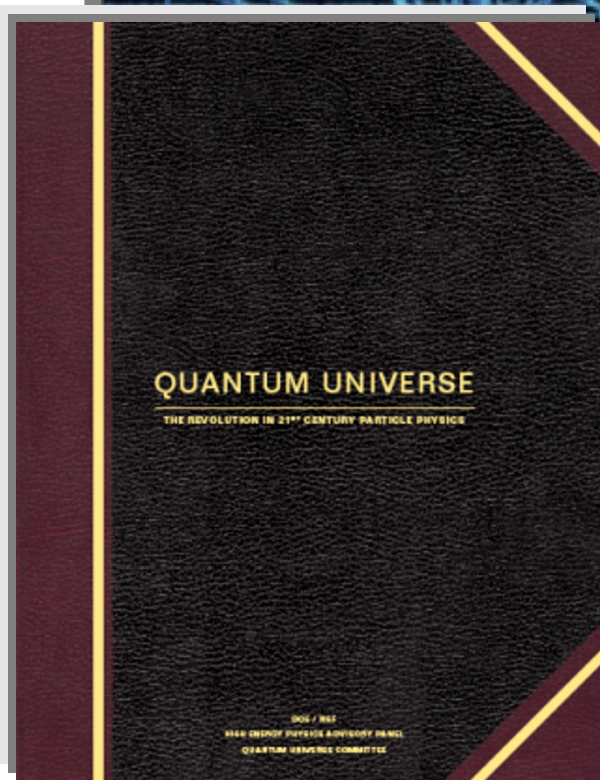
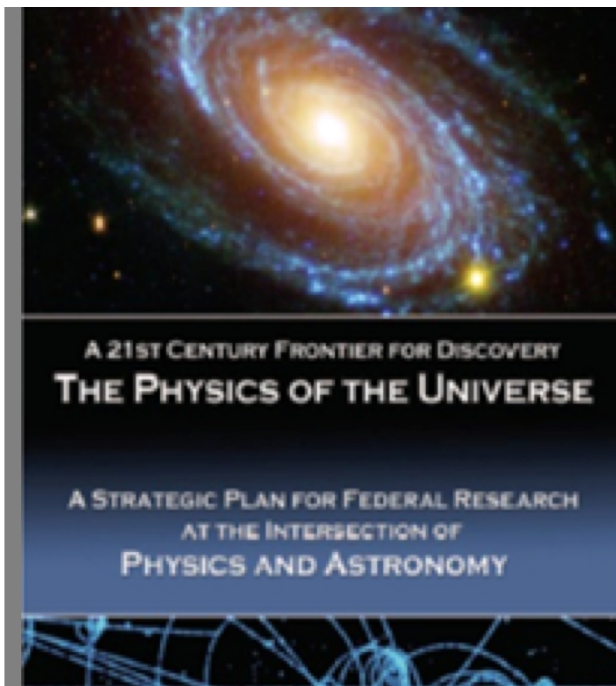
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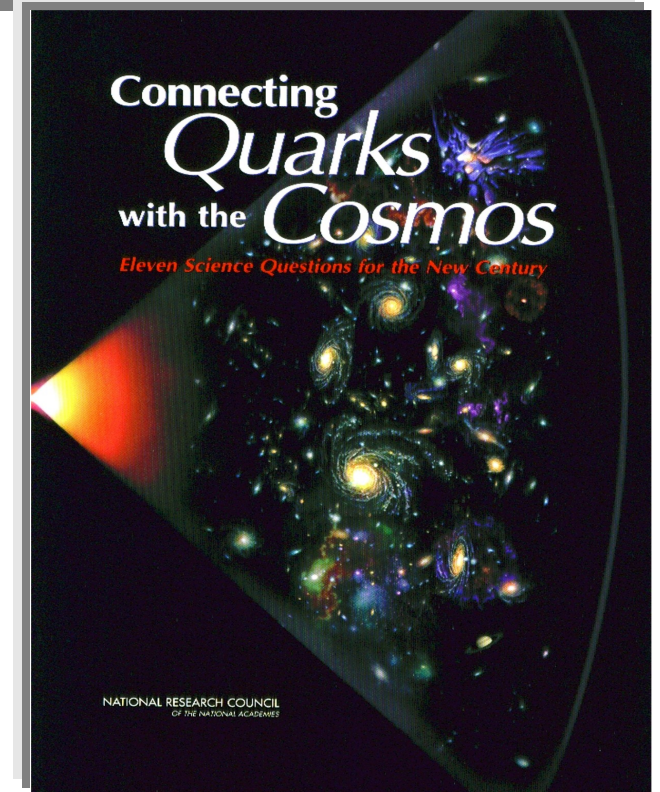
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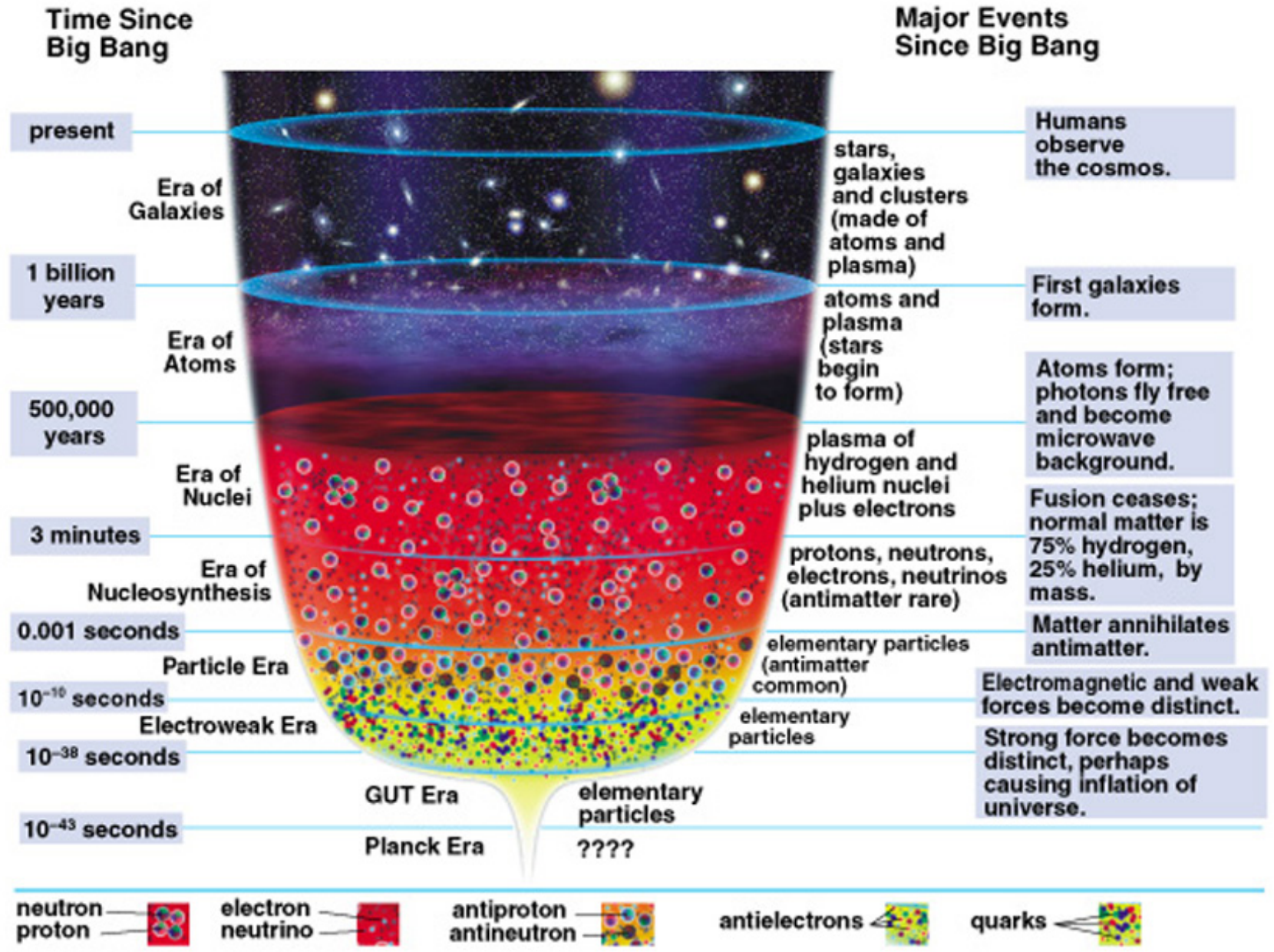


MPS Framework and CANS

Opportunities



Marvin Goldberg
MPS-EPP



Proposal Review Criterion: *Broader Impacts*

- Advancement of discovery and understanding while promoting teaching, training and learning
- Participation of underrepresented groups
- Enhancement of infrastructure for research and education
- Dissemination of results to enhance scientific and technological understanding
- Benefits to society



NSF-13

APPROACH:

**Build on Successful Cross Directorate
Projects**

CISE; EHR; MPS: OISE

Add Interdisciplinarity

Institutionalize

Internationalize

Broader Impacts Reflecting Framework



INTERNATIONALIZE

Experiments and-

OECD Global Science Forum

Grid programs have been in progress in OECD countries for some time, e.g., in the US for over 5 years, in UK, as a formal government supported programs for about 3 years. Early adoption of Grid programs has been enthusiastic among the user community. Grids are highly relevant to a number of scientific domains that have been the subject of Global Science Forum activities in recent years: high energy physics, astronomy, bioinformatics, neuroinformatics, science education. Demonstrator projects have shown benefits in the five areas itemized above, but there has not yet been a systematic examination of the challenges and opportunities that are the chief concern of science funding agencies and science policy administrations, that is, topics that are appropriate for consideration by the OECD Global Science Forum.

...OECD Global Science Forum

It is an opportune time to carry out a critical assessment of such fundamental questions on the potential impact of Grid programs on international science and technology collaborations, and on society as a whole, as in most countries Grid programs have progressed to such an extent that they are poised at the onset of commercial and enterprise applications. Such assessment and understanding of the Grid program as carried out in various OECD member countries will assist policy makers to formulate government policies to encourage international science and technology collaborations, protect intellectual property rights, or regulate its applications to commerce and businesses. Hence there is an urgency in carrying out the activities as proposed in the next section.