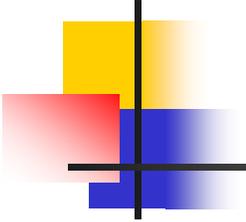




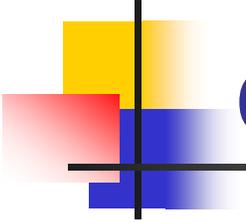
Sally Dawson (BNL)
Presentation to HEPAP, 9/23/2004



Bureau of Physics and Astronomy of NRC

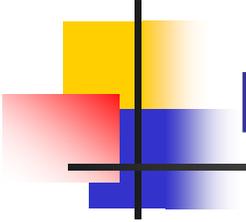
Burt Richter, Chair

- Surveys all branches of Physics every 10 years (Decadal Survey)
 - Atomic, molecular, and optical science
 - Plasma Physics
 - Condensed Matter and Materials Physics
 - Elementary Particle Physics
 - Nuclear Physics
 - Gravitational Physics
- Most recent decadal survey, *Physics in a New Era* (2001), T. Appelquist, Chair
 - EPP (98), B. Winstein, Chair



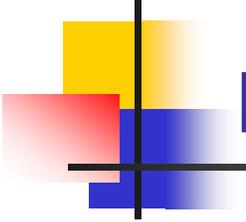
Guidelines for Surveys

- Decadal survey has 2 purposes
 - Provides snapshot of the field that is useful for tracking and understanding the evolution of the science
 - Provides a process whereby emerging opportunities can be identified and developed
 - Will focus on identifying the science drivers for the physics and the enablers of progress towards science goals



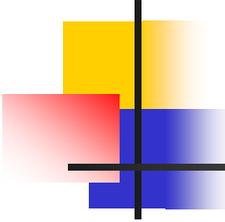
EPP2010 Charge

- Committee is charged to:
 - Identify, articulate, and prioritize the scientific questions and opportunities that define elementary particle physics
 - *Emphasis on ranking science priorities, not facilities or instruments necessary to do the work*
 - Recommend a 15-year implementation plan with realistic, ordered priorities to realize these opportunities



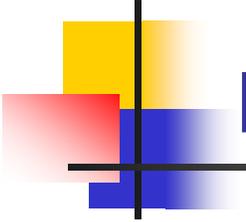
Building on the previous work

- Study will build on many earlier studies
 - Quantum Universe (P. Drell)
 - The Science Ahead, the Way to Discovery (Bagger/Barish)
 - Physics of the Universe (OSTP)
 - Office of Science 20-year Facilities Outlook (Orbach)
 - Quarks to the Cosmos (Turner)
- No need to reinvent the wheel



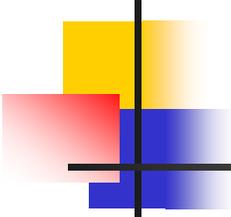
Committee members

- N. Augustine (Lockheed Martin)
- Jon Bagger (JHU), liason to BPA
- P. Burrows (London)
- Sally Dawson (BNL), Vice-Chair
- S. Faber (UC observatories)
- S. Freedman (UC, Berkeley)
- J. Friedman (MIT)
- J. Hezir (EOP Group)
- N. Holtkamp (Oak Ridge)
- T. Kajita (Tokyo)
- N. Lane (Rice)
- N. Lockyer (Penn)
- S. Nagel (Chicago)
- H. Quinn (SLAC)
- R. Patterson (Cornell)
- C. Shank (LBNL)
- ***Harold Shapiro (Princeton), Chair***
- P. Steinhardt (Princeton)
- H. Neal (Michigan)
- H. Varmus (Sloan-Kettering)
- E. Witten (IAS)



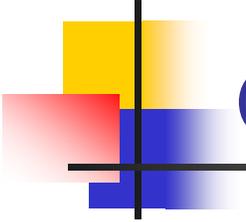
Not your usual Committee

- Many non-physicists
- Major goal is to engage other communities
- Sharpen physics questions
- Place US particle physics in an international setting
- Present a compelling vision of the science of particle physics



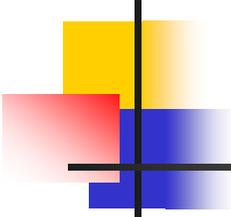
Work plan

- 1st meeting, Nov 30-Dec 1, 2004, in Washington
 - Focus on science questions and general issues of how to set scientific priorities
- 2nd Meeting at SLAC, Jan 30-Feb 1, 2005
- 3rd Meeting at Fermilab, May, 2005
- 4th Meeting in Washington, August, 2005
- Goal: Report by Dec. 2005
 - Majority of meetings will be open



Community input

- Open forum at every meeting
 - Organized by DPF Executive Committee
- Send email to epp2010@nas.edu



Conclusion

- Particle Physics has an exciting story to tell
 - Please contribute your thoughts and advice
 - EPP2010 is an opportunity to communicate our science