

MPS Division of Physics

Briefing for MPS Advisory Committee

C. Denise Caldwell, DD

November 16, 2018

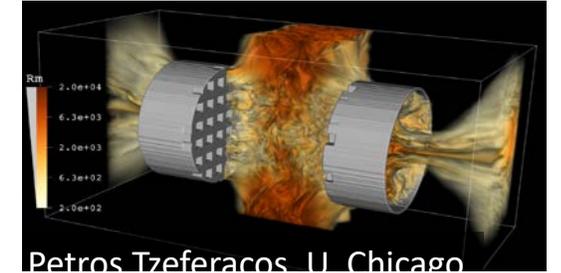




Credit: IceCube

Community Input in PHY

(In addition to the MPSAC)

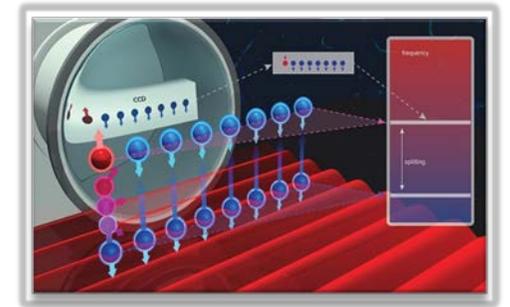


Petros Tzeferacos, U. Chicago

Two major FACA Committees: High Energy Physics Advisory Panel (HEPAP)
Nuclear Science Advisory Committee (NSAC)

Committee of Visitors – Best mechanism for building trust in community

National Academy Decadal Surveys: Atomic, Molecular and Optical Physics
Plasma Physics



Trapped ion computation
(JQI – University of Maryland)

Special National Academy Reports: “Connecting Quarks with the Cosmos” (Released 2003)
“Research at the Intersection of the Physical and Life Sciences”
(Released 2010)

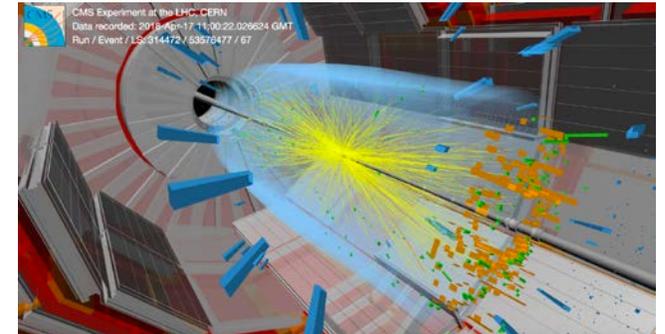
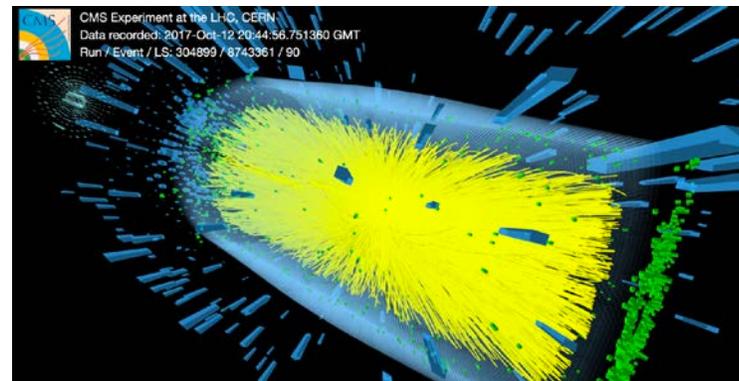
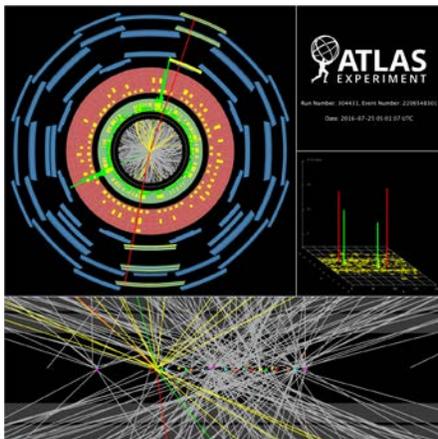


PHY Example

Report of High Energy Physics Advisory Panel (HEPAP) – Provided by Particle Physics Project Prioritization Panel (P5) – “Building for Discovery: Strategic Plan for US Particle Physics in the Global Context”; Released May 2014.

Followed by: “Implementing the P5 Recommendations: Report of the Subcommittee of the NSF MPS Advisory Committee”; January 2015.

Resulting in: Decision to engage in MREFC project for the upgrade of the ATLAS and CMS detectors at CERN; Total Project Cost \$150 M; Total Planning Costs \$23 M.



PHY Upcoming Activities

Review of Final Design for HL-LHC upgrade – Target February 2020 NSB Action Item

MPSAC Subcommittee Report on Physics Frontiers Centers program – Report due June 2019

PHY CoV – Scheduled for January 2019 – Report to MPSAC in April 2019

Workshop: Quantum Biology and Quantum Processes in Biology, 26-27 November Tyson's Corner

Workshop: Emerging Connections between AMO and Particle Physics, planning for spring 2019



Credit: LIGO Laboratory

Eagerly awaiting O3 LIGO Science Run, beginning in spring 2019

