

Biography:

In my 25 years in the field, I have had the great fortune to have worked on a large variety of experimental collaborations and to have become very familiar with the cultures surrounding the three international laboratories that have had the greatest impact in high energy physics over the past three decades. As a PhD student at the University of Colorado, Boulder, I worked on every facet (construction, installation and calibration of detectors; data-taking; software development; and data analysis) of a small, highly-successful fixed target experiment: E687, photo production of charmed hadrons (Fermilab). I subsequently worked on the OPAL experiment at LEP (CERN) as a postdoc at the University of Maryland, where I specialized in bottom physics and produced one of the first measurements of the time dependence of B-Bbar mixing. Moving on to the BaBar experiment at SLAC, I explored corners of the Standard Model that had not yet come under detailed scrutiny: CP violation in the B meson sector. I was co-convenor of the Charmless 2-Body B Decay Analysis Working Group, chiefly responsible for measurements of the angle α of the unitary triangle ($B \rightarrow \pi \pi$) and the first observation of direct CP violation in the B system ($B^0 \rightarrow K^+ \pi^-$). I led the task force to measure tracking efficiencies and charge asymmetry systematics and was also secretary of the BaBar Speakers Bureau. In 2008, I joined the ATLAS collaboration, where I've focused on muon software and performance and analysis in the Exotics Group. Most recently, I have been concentrating on simulation and reconstruction activities for the muon New Small Wheel Upgrade (for the LHC Phase I luminosity upgrade), for which I was editor of the Performance chapter of the Technical Design Report, and searches for new physics in the lepton+jets final state, arising from models of extra dimensions (so-called "black hole" states). I am currently a professor at the University of Massachusetts, Amherst, director of the Graduate Program and co-PI on the experimental group DOE grant.

Statement:

The LHC project is at a significant juncture, on the heels of the tremendous success stories of the first Run, capped off by the discovery of a new particle with properties consistent with the SM Higgs boson, and in the midst of machine upgrades that will increase the beam energy, allowing us

to probe significantly higher energy scales, furthering the quest for physics beyond the SM. At the same time, there is considerable uncertainty in the field: How will we cope with ever tighter budget constraints? What shall our priorities be as we approach upgrades to the LHC? How do we recruit, train and mentor a new generation of young physicists concerned about the future of the field? How do we best highlight the contributions of the US groups? The USLUO is the forum for bringing together enthusiastic members of our field in all of the LHC experiments, acting in the best interest of the full community. It would be a great pleasure to serve on the USLUEC and have the opportunity to lead these efforts at such a critical moment.