Tipp 2014 - Third International Conference on Technology and Instrumentation in Particle Physics



Contribution ID: 445 Type: **not specified** 

## The Challenges and Applications of Sub-Psec Large Area Detectors

Thursday 5 June 2014 14:00 (30 minutes)

The precision of large-area spatial measurements has improved dramatically over the last 50 years due to the invention of silicon strip and pixel detectors. The precision of large-area time measurements, however, has only recently started to attract a similar level of attention and investment. The ultimate time resolution of large-area devices is not yet known, but the intrinsic resolution of sensors can be much better than the 1-inch resolution typical of large time-of-flight systems. I will discuss the status of the development of large-area micro-channel-plate-based detectors, for which the intrinsic scale that determines the time resolution is 10's of microns. There are challenges, but (so far) it seems no show-stoppers. I will touch on some of the many proposed applications.

Author: FRISCH, henry (university of chicago)Presenter: FRISCH, henry (university of chicago)

Session Classification: Plenary