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Abstract: LPS

Session: Monday Morning

The Leading Proton Spectrometer (LPS) detector, which was a part of the ZEUS detector at HERA, it's a silicon microstrip detector designed to detect high rapidity leading protons in e-p scattering at HERA. Its design pioneered the model of radiation hard silicon system and the concept of binary readout. Santa Cruz designed the the front-end electronics using a pair of chips: an analog amplifier, the TEKz bipolar chip, and a digital memory, the DTSC CMOS chip. In this talk I will review the pioneering years at SCIPP of the LPS development and the physics results achieved with the LPS.