

APR14-2014-000249

Abstract for an Invited Paper
for the APR14 Meeting of
the American Physical Society

Silicon Detectors

HARTMUT SADROZINSKI, SCIPP, Univ. of California Santa Cruz

The use of silicon detectors has experienced an exponential growth in accelerator and space based experiments, similar to trends in the semiconductor industry as a whole, usually paraphrased as “Moore’s Law.” Some of the essentials for this phenomenon will be presented, together with examples of the exciting science results which it enabled. With the establishment of a “semiconductor culture” in universities and laboratories around the world, an increased understanding of the sensors results in thinner, faster, more radiation-resistant detectors, spawning an amazing wealth of new technologies and applications, which will be the main subject of the presentation.