Silicon Drift Detectors: a Constantly Progressing Detection Technique

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I will report on the effort to produce the Silicon Drift Detector to be used in the CERN LHC ALICE experiment, from the progressive iterations to optimise the various on board electrodes to the redoundancies introduced at various levels to make the detector extremely reliable and stable. Various aspects of this detection technique, using large area devices, and its adaptability to other projects will be discussed.