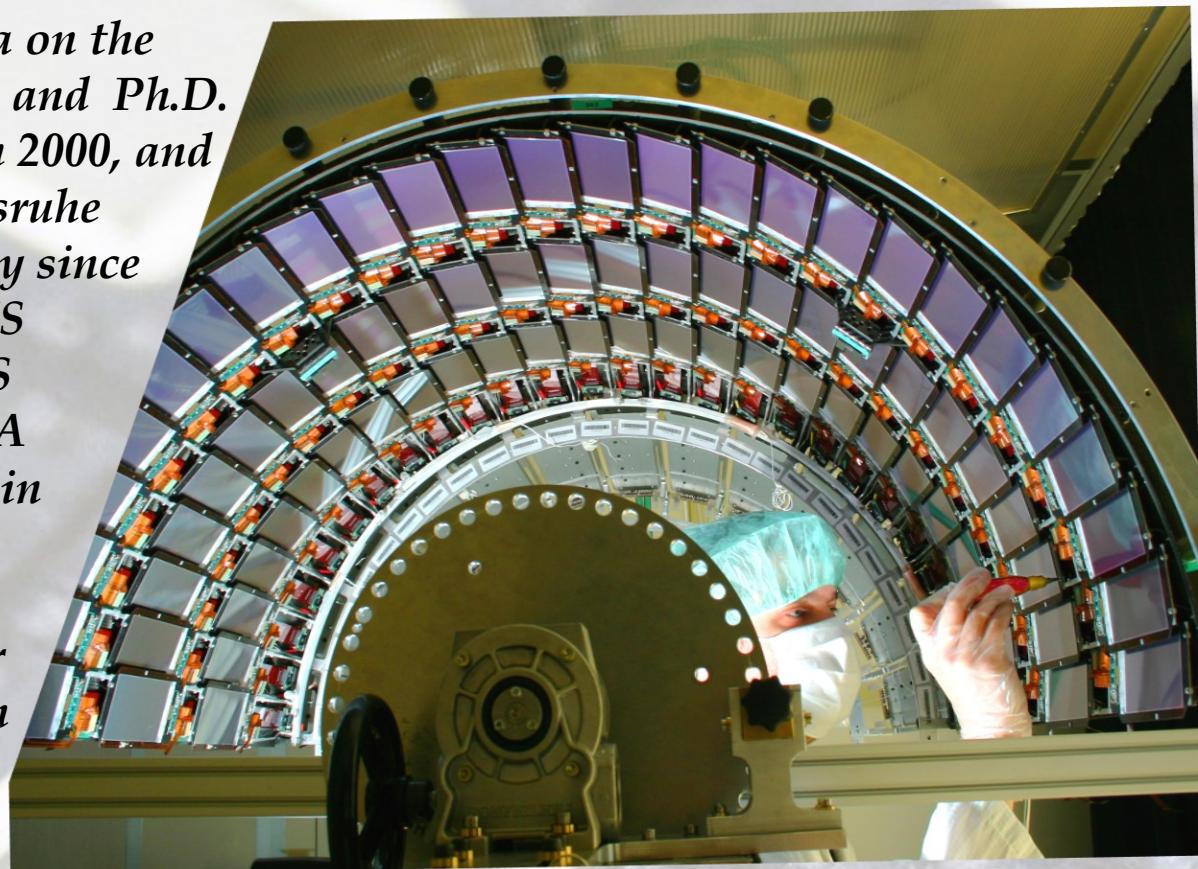


## Development of Silicon Detectors in HEP experiments

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*Prof. Frank Hartmann did his Diploma on the “Delphi Microvertex” detector in 1996, and Ph.D. on the “CDF II Tracker at Fermilab” in 2000, and Habilitation in 2018. He is at the Karlsruhe Institute of Technology (KIT), Germany since 2000 working on CMS. He was the CMS Tracker Project Manager in 2011, CMS Upgrade Coordinator in 2018 and ECFA R&D Roadmap TF8 integration Chair in 2022. He is an expert on the silicon sensors, safety and control systems, tracking systems and complex detector systems. He published a monograph on the evolution of Silicon Sensor technology in particle physics in 2017.*



The talk will span the developments on silicon sensors from the early days in the 70s to today plus an outlook to the future. It will emphasize the technological aspects of sensors and also give examples of where they have been deployed, e.g. tracking or calorimeter detectors. It will discuss strip, pixel, pad, and timing sensors in passive and active technologies. The topics of radiation tolerance and their mitigation will be touched on.

**Friday, February 17, 2023 in AG-66, TIFR Mumbai at 4 p.m.  
YouTube Live: [https://youtube.com/live/xxSsjg7\\_hkI?feature=share](https://youtube.com/live/xxSsjg7_hkI?feature=share)**