

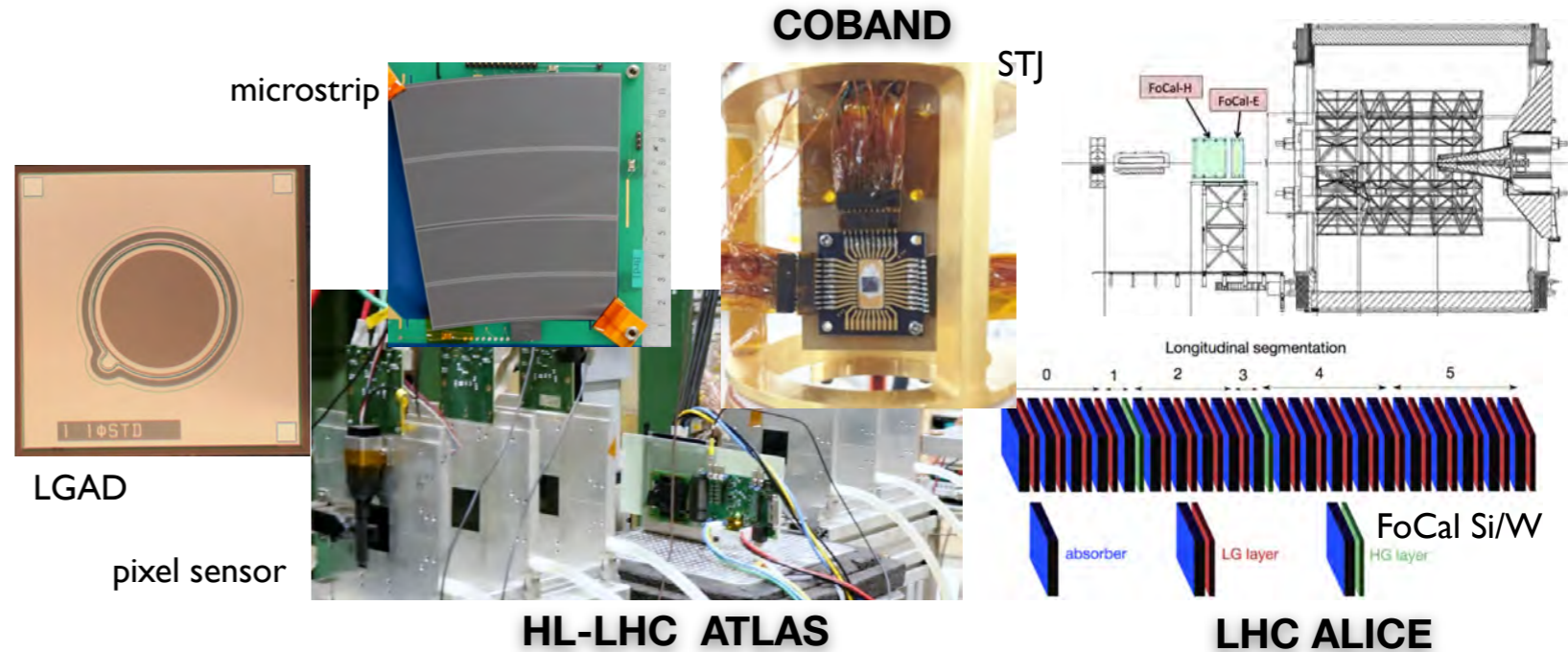
Division for Development of Photon and Particle Detectors

★ Advanced detectors enabling new physics measurements

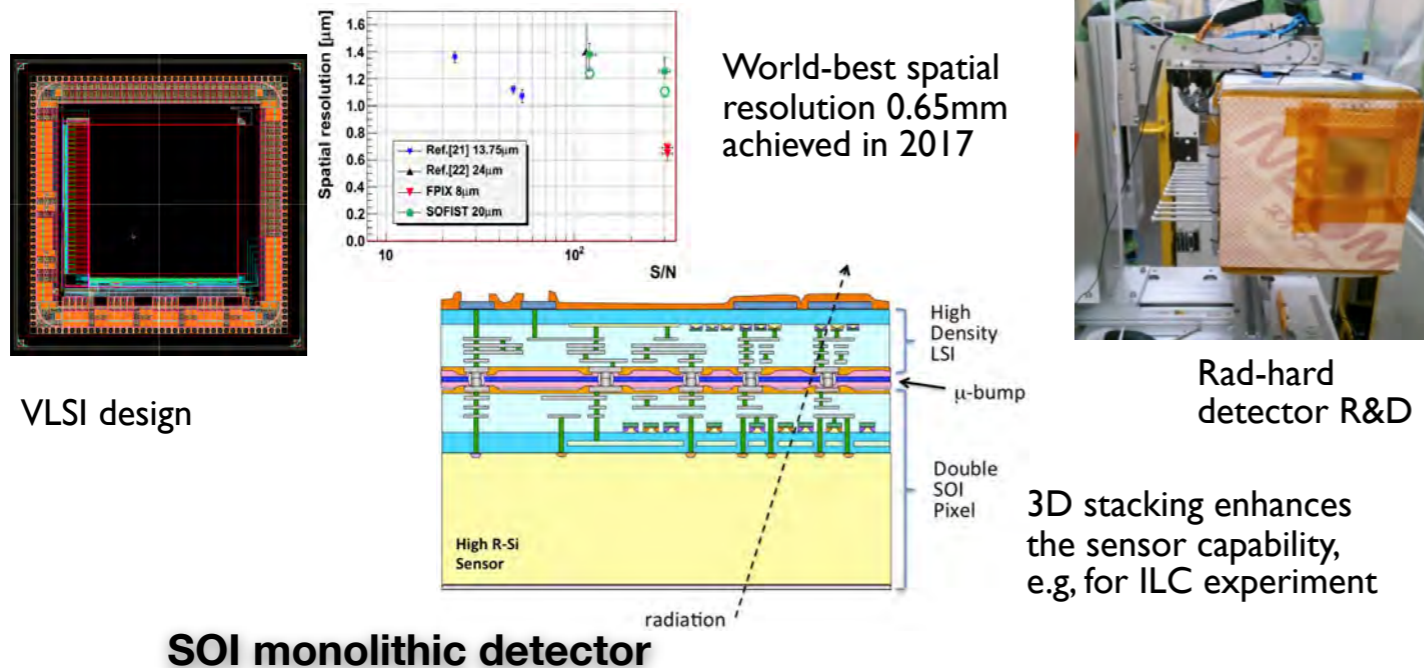
Advanced detectors based on new technologies promote and enable measurements in various physics area beyond the current limitations. The Division supports R&D of new detectors for the projects of TCHoU and develops innovative detectors in the framework of TIA activities.

Development of PPDs in close linkage with other TCHoU divisions

Developments of silicon semiconductor devices for ATLAS and ALICE detector upgrades, STJs for COBAND project, and detectors for other TCHoU projects are pushed forward by the Division with exchanging knowledge and expertise. (For details, visit corresponding project pages.)



Innovative detectors in TIA



TIA (Tsukuba Innovation Arena) brings together the potentials and resources of five organizations in the Tsukuba area. The Sensor & Imaging Square of TIA is organized for developments of advanced detectors to create new scientific fields and industries.

Innovative monolithic pixel detectors are being realized by the SOI technology. Design and fabrication of VLSI are made in collaboration with KEK and VDEC (U Tokyo). 3D stacking using μ -bumps enables further enhancement of the sensor capability.

The projects for STJs and imaging of massive objects (muon-radiography) are also included in the Square.