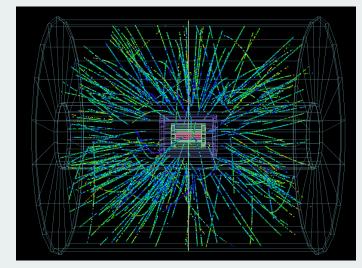
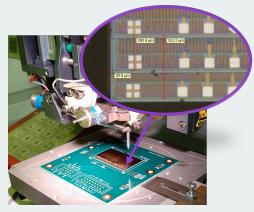
Image: ALICE/CERN



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Problem statement

The aim of the Pixel Chamber project is the production of a thin stack of monolithic active pixel sensors (MAPS) for continuous, high-resolution, three-dimensional tracking inside the particle detectors at CERN. The purpose of this bachelor thesis is to develop a method for stacking ALPIDE sensors for the production of the envisaged stack, and designing a carrier PCB to distribute power, clock and data lines to the sensors. Finally, to create a readout system and software to extrapolate the particle tracks and visualise the data.







Sindre Bæra 228625@student.usn.no Micro & nanotechnology Georg Lindefjeld Berg 239350@student.usn.no Electronic systems design Emil-Alexander Thoresen Motrøen 236845@student.usn.no Cyber security Noah Lennestad 237173@student.usn.no Cyber security Frida Jaritz Meyer 237226@student.usn.no Micro & nanotechnology Engebret Pallsveen 225930@student.usn.no Micro & nanotechnology

