

# Highly Integrated All-Silicon Detector Modules - Belle II PXD and beyond

*Wednesday, June 19, 2024 2:00 PM (15 minutes)*

We will present and discuss the lessons learned during the R&D and production phase of the all-silicon detector modules for Belle II PXD. The focus will be on technology and quality control in the production phase. The same technology is also being utilised for direct electron detectors and is now being extended to incorporate active cooling with integrated micro-channels.

Finally we will discuss the future plans and the extension of the interconnection technology at the MPG HLL including low temperature direct and hybrid bond techniques for heterogeneous integration.

## **Type of presentation (in-person/online)**

in-person presentation

## **Type of presentation (scientific results or project proposal)**

Presentation on scientific results

**Primary author:** ANDRICEK, Laci (MPG Semiconductor Lab)

**Presenter:** ANDRICEK, Laci (MPG Semiconductor Lab)

**Session Classification:** WG7/WP4 - Interconnect technologies