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ATLAS ITk activities at SFU, TRIUMF and UBC

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In 2024 the Large Hadron Collider at CERN will enter its High Luminosity phase, which will see its instantaneous luminosity reach seven times its design value and will produce pp collisions at 14 TeV with an average of 200 interactions per bunch crossing.

These challenging conditions are beyond the ATLAS design and require an upgrade of the ATLAS tracking system. The ATLAS new Inner Tracker (ITk) will be an all-silicon tracking detector composed of pixel and strip sensors arranged in barrel and end-cap discs.

ATLAS Canada is participating as a whole in the building process of the ITk strip end-cap discs.

As we move towards the production phase of the ITk, a lot of effort has been put in the designing, prototyping and testing of the ITk components.

This talk presents the ITk activities involving the SFU, TRIUMF and UBC ATLAS groups, focusing on the building of the modules, the loading on the supporting structures, the electrical tests and the data taking at testbeam facilities.

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