Contribution ID: **26** Type: **Talk (invited speaker only)**

[B05] First test results from the ITkPixV1 pixel readout chip

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The ITkPixV1 readout chip was designed by the RD53 collaboration as the pre-production chip for the ATLAS Inner Tracker (ITk) Pixel detector upgrade and is the successor of the RD53A demonstrator chip. It features a 400x384 pixel array with each pixel being 50um by 50um size. The chip was designed in 65nm CMOS technology and is optimised for the operation as the innermost pixel layer in the ATLAS and CMS detectors at the HL-LHC. ITkPixV1 was submitted in March of 2020 and this presentation will summarise the most recent results from testing to this date. The full verification of the chip needs to occur within a one year time frame, at which point the final ITk pixel production chip, ITkPixV2, will be submitted.

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