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An Integration Framework Tool for ATCAs in the ATLAS Detector Control System

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Abstract content
   (Max 300 words)
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In the year 2022 the Large Hadron Collider at CERN is scheduled to undergo a major upgrade. A large proportion of the current front-end electronics, on the Tile Calorimeter sub-detector, will be upgraded and relocated to the back-end. A demonstrator program has been established as a proof of principle. A new system will be required to house, manage and connect this new hardware. The proposed solution is an Advanced Telecommunication Computing Architecture (ATCA) which will not only house but also allow advanced management features and control at a hardware level by integrating the ATCA chassis into the Detector Control System. A framework tool has been developed to automate and facilitate this integration effort.

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PhD

Main supervisor (name and email)
and his / her institution

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