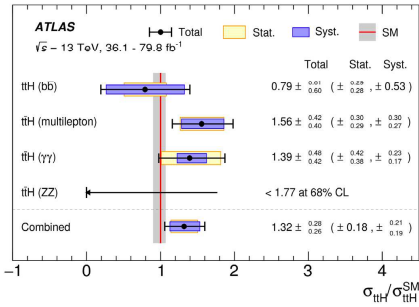
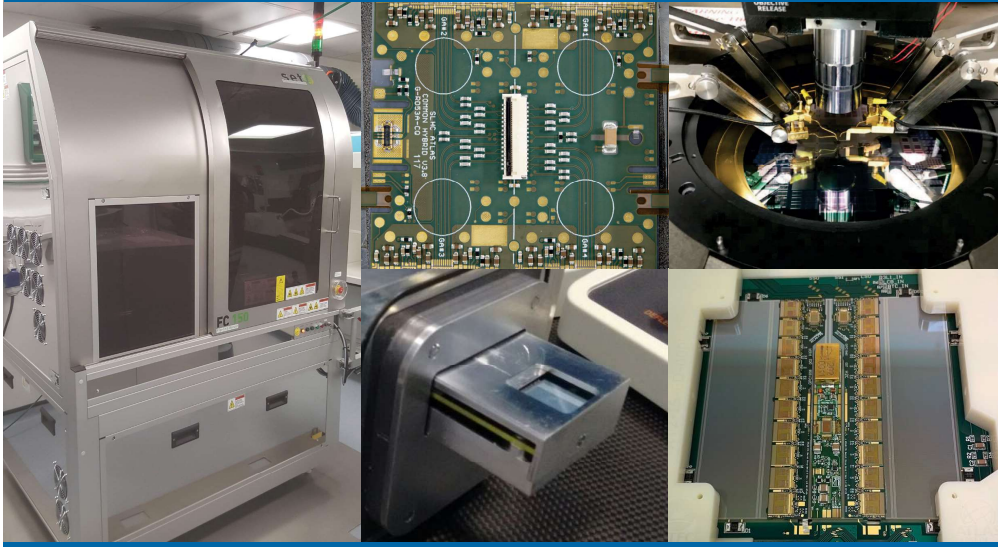
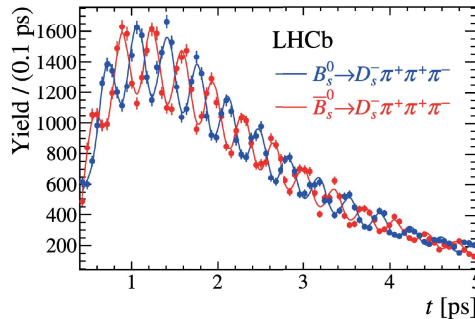




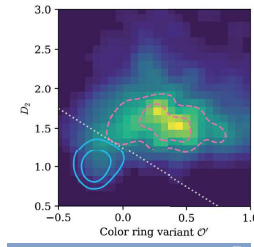
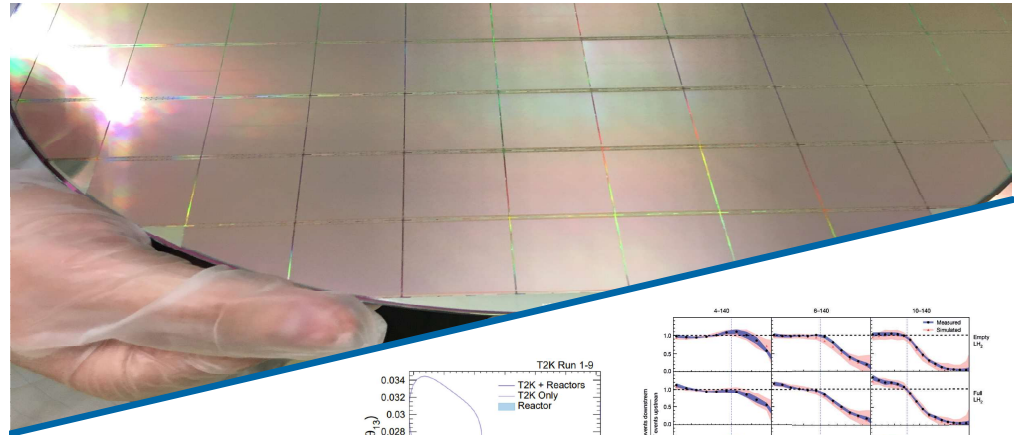
STFC Consolidated Grant (2022-25)



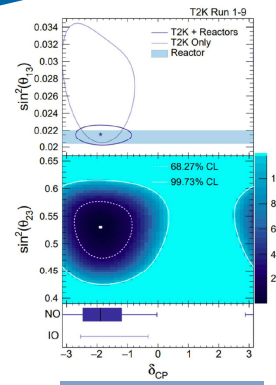
ATLAS ttH Observation



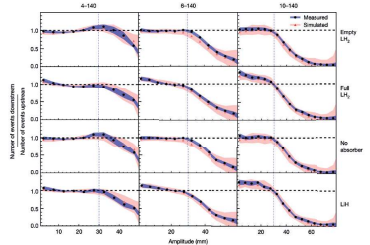
LHCb measurement Δm_s



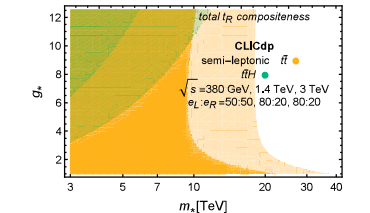
Jet colour ring VHBb



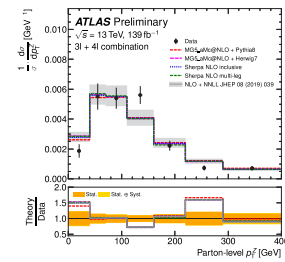
T2K CP violation



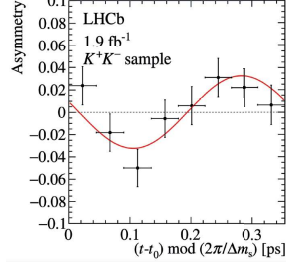
MICE ionisation cooling



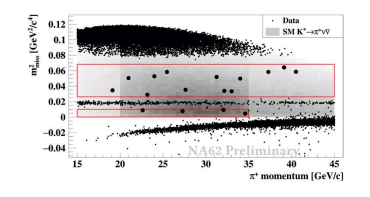
CLIC top compositeness



ATLAS Differential ttZ



LHCb CP violation B_s^0



NA62 Evidence for $K^+ \rightarrow \pi^+ \nu \bar{\nu}$

Front Cover

Montage: FC150 flip chip machine (left), RD53A prototype ATLAS ITK pixel quad module (top middle), Electrical probe station testing LGAD sensor (top right), Prototype ATLAS ITK strip module built in Glasgow (bottom right), Medipix sensor and readout system developed at Glasgow (bottom middle).

Inside Front Cover

Banner: Timepix4 ASICs on a 300mm wafer.

ATLAS ttH Observation: Signal strength in the various final-states used to observe the ttH process for the first time [JPLB 784 (2018) 173].

LHCb measurement Δm_s : Most sensitive measurement of Δm_s to date [arXiv:2011.12041].

Jet colour ring VHBb: Expected performance of new jet colour ring observables for VHBb event-selection [arXiv:2008.026 (2020)].

T2K CP violation: 3 σ constraint on leptonic CP violation from T2K [Nature 580 (2020) 339-344].

CLIC top compositeness: CLIC top compositeness 5 σ discovery regions for total t_q [JHEP 11 (2019) 003].

ATLAS Differential ttZ: First differential measurement of the Z boson's p_T in ttZ events at ATLAS [ATLAS-CONF-2020-026].

LHCb CP violation B_s^0 : First observation of time-dependent CP violation in B_s^0 decays [arXiv:2012.05319].

NA62 Evidence for $K^+ \rightarrow \pi^+ \nu \bar{\nu}$: First evidence of this rare process from NA62 [JHEP 11 (2020) 042, updated result for ICHEP 2020].