



TOTEM

RRB

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S.Giani

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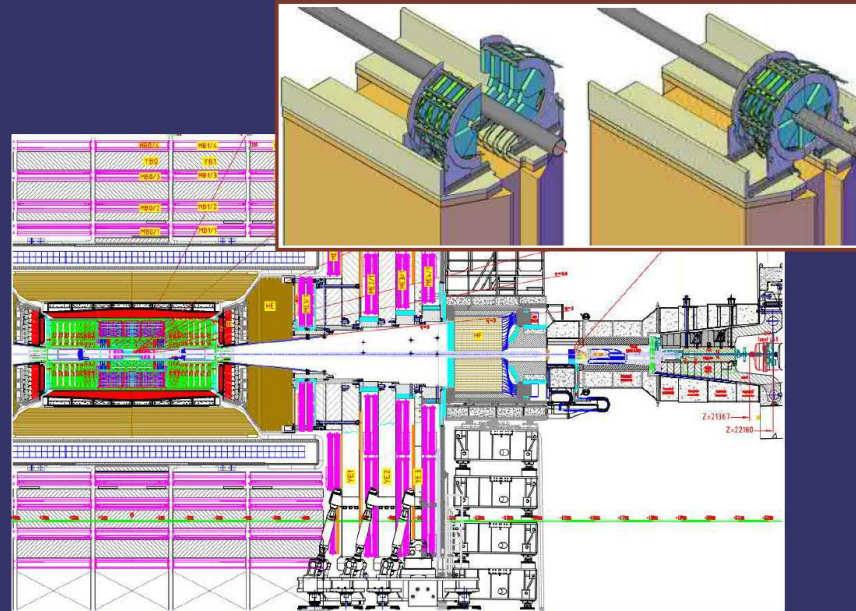
TDR for new T2
delivered to LHCC
in June

Referees feedback
received & implemented



CERN-LHCC-2019-007
TOTEM-TDR-004
4 June 2019

TOTEM



Upgrade of the TOTEM T2 Telescope
TECHNICAL DESIGN REPORT

Endorsed by
LHCC in September

Approved by
Research Board



First measurement of elastic, inelastic and total cross-section at $\sqrt{s} = 13$ TeV by TOTEM and overview of cross-section data at LHC energies

TOTEM Collaboration

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First determination of the ρ parameter at $\sqrt{s} = 13$ TeV: probing the existence of a colourless C-odd three-gluon compound state

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Elastic differential cross-section measurement at $\sqrt{s} = 13$ TeV by TOTEM

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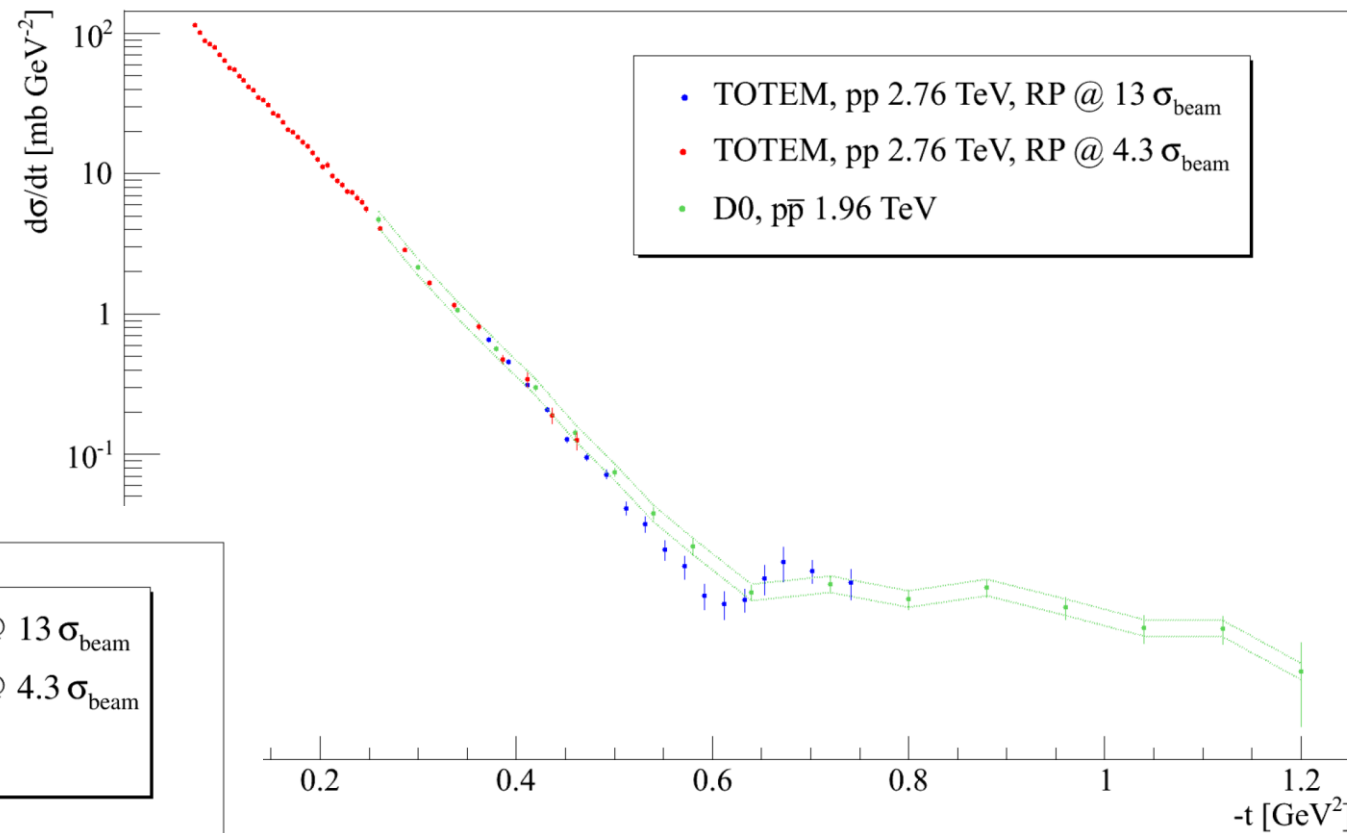
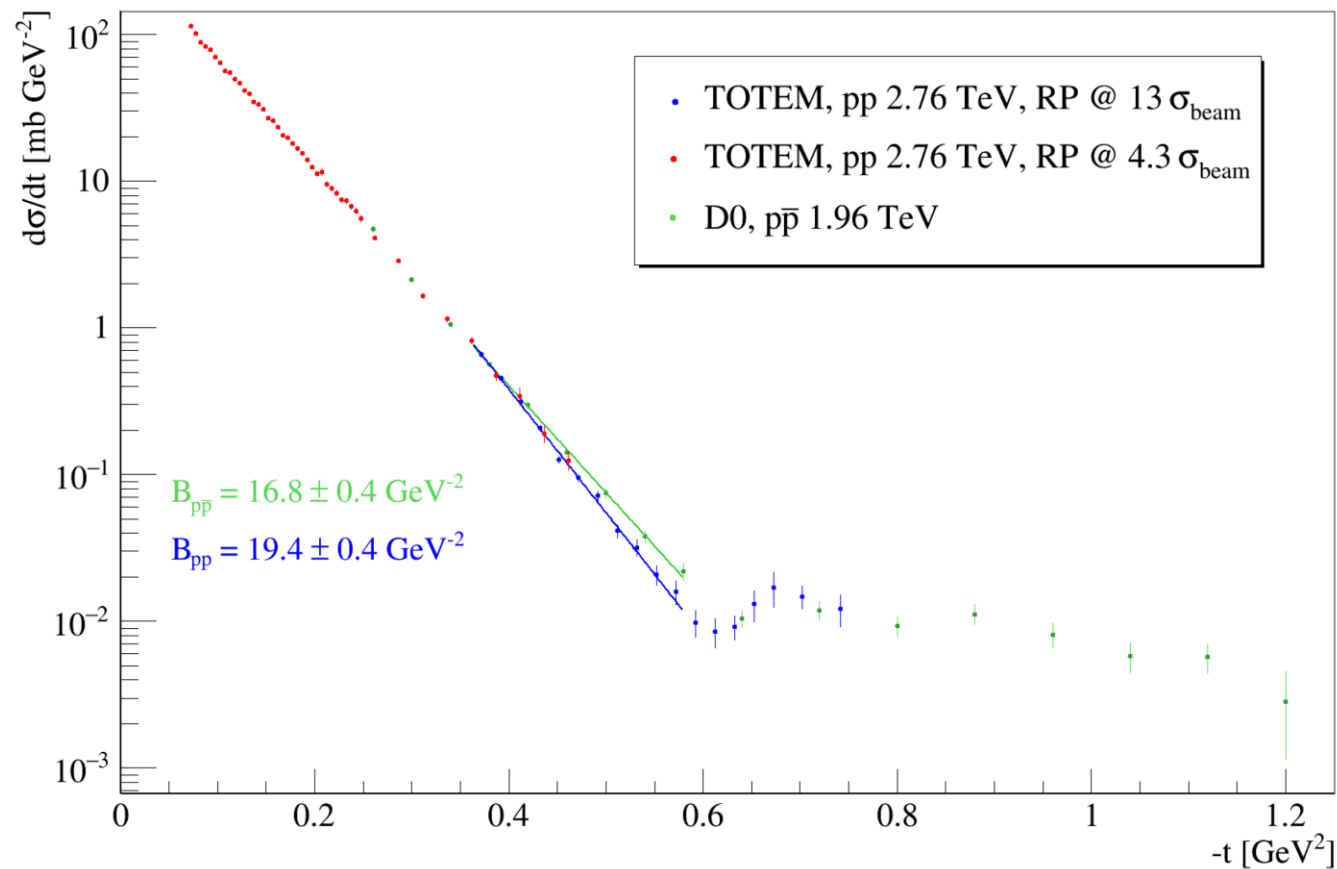
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Elastic differential cross-section:
p-p vs p-pbar comparison at TeV scale



$$3g J^{\text{PC}} = 1^{--}$$