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## The CMS Level-1 Trigger for the LHC Run 2

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The CMS Level-1 Trigger from Run 1 is being replaced with an entirely new system which is based on large FPGAs, 10 Gbps optical links and it is based on the uTCA technology. This platform allows for new trigger algorithms whose sophistication approaches those of higher level triggers. Whilst the new trigger will be operational early in 2016, elements of it will be installed already in 2015. The new algorithms allow for calorimeter and muon trigger objects of substantially higher resolution. Pipe-up subtraction for calorimeter objects is also performed at Level-1 which results to marked improvements for the electron, tau and jet triggers. All these upgrades will improve significantly the background rejection and the efficiency compared to Run 1. Results on the performance of the new trigger based both on Monte Carlo and data are presented.

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