

# Flavour symmetries in the era of the LHC

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## Abstract content

The LHC is set to achieve a total 14 TeV collision energy for every pair of protons colliding. At this energy it will be possible to study interactions of the SM particles that may contain particles beyond it. We therefore will continue improving our understanding of particle physics, at the very least. Ideally many particles would be discovered and its interactions would be studied. A framework study for understanding the decay, mixing and CP breaking processes of these and the SM particles are the “flavour symmetries”. Proposed to explain the hierarchy of fermion masses and mixing in the SM but posed for explanations and predictions of what may happen beyond the SM. In this talk I will review the present bounds on flavour changing neutral currents, CP violation processes and make a summary of how flavour symmetries can explain them.

## Summary

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