

# Custodial symmetry and the Higgs sector

*Saturday, 1 June 2019 14:00 (30 minutes)*

Custodial symmetry is an accidental symmetry of the Standard Model Higgs sector that underlies the well-tested relationship between the W and Z boson masses and their gauge couplings. In extended Higgs sectors this symmetry can be violated, with potentially fatal experimental consequences. I'll describe the effects of this violation in the Georgi-Machacek model, which serves as a prototype for models of electroweak symmetry breaking from "exotic" Higgs fields larger than electroweak doublets.

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