



# Snowmass 2021: Vector boson Scattering

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# Vector boson scattering

- Longitudinal scattering of boson pairs
  - Achievable precision of the longitudinally polarized cross sections at different collider energies
  - Using the same-sign WW channel. Leptonic WZ/ZZ channels can also be considered
- Triple and quartic gauge couplings
  - Limits on anomalous couplings in EFT framework (dim-6 and dim-8?)
  - Comparison of the sensitivity to Diboson and Triboson inclusive productions
- Resonant model, singly and doubly-charged Higgs bosons
  - Higgs triplets  $\rightarrow$  Georgi-Machacek model
  - Triplet VEV vs. charge Higgs mass plane

