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Large electroweak corrections to vector-boson scattering at the LHC

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Vector-boson scattering is a key process to investigate the mechanism of electroweak symmetry breaking at the LHC.
For the first time full NLO electroweak corrections to off-shell vector-boson scattering are presented.
The computation features the complete matrix elements, including all non-resonant and off-shell contributions, to the electroweak process pp ⟶ μ + ν μ e + ν e jj.
It is fully differential, and event selections are applied to the final states such that the predictions can be directly compared to experimental measurements.
The corrections are surprisingly large, reaching -16% for the fiducial cross section and up to -40% in the tails of distributions.
These large corrections are due to enhanced logarithms in the bosonic virtual corrections.
The methods used and some exemplary results will be presented.

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