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## A spin on same-sign W boson pair production at the LHC

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In double parton scattering processes, the interparton correlations can have an impact on the size of the cross section and significantly alter the distributions of particles in the final state.

We focus on the production of a pair of W bosons with the same electric charge. We demonstrate that the LHC has the potential to extract non-trivial information on spin-correlations between two quarks inside the proton through the measurement of the rate at which the final state leptons are produced in the same hemisphere compared to the opposite one.

We employ different models for the double parton distributions (DPDs) to study different types of correlations between two quarks and we show that the spin correlations are a prime suspect for the generation of a large asymmetry.

**Primary authors:** COTOGNO, Sabrina (Nikhef); KASEMETS, Tomas (JGU Mainz); MYSKA, Miroslav (Czech Technical University (CZ))

**Presenter:** COTOGNO, Sabrina (Nikhef)

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