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The Whizard MC generator: status and plans

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We report on current developments and future plans for the Whizard Monte-Carlo generator framework: On the physics part, we focus on recent progress and applications of the NLO EW automation, both for SM and BSM models, as well as the effective vector boson approximation and EW PDFs for EW interactions at the highest energies. On the technological part, we comment on the current status of the GPU offloading efforts and on further optimizations of phase-space sampling using machine-learning methods. Finally, we will update on the most recently available beam spectrum simulations for FCC-ee and XCC.

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