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Studies of final-state photon radiation in the process $p_p^{(-)} \to W^\pm \to \ell^\pm \nu^1$ CATHERINE BERNACIAK, DOREEN WACKEROTH, University at Buffalo, The State University of New York — We study the effects of multiple soft, collinear photon radiation off a final state lepton in the process $p_p^{(-)} \to W^\pm \to \ell^\pm \nu$, as implemented in the MC program WGRAD3. EW virtual effects as well as up to two hard photons radiating off a final-state lepton are also included. These effects are compared with the MC program HORACE which also includes the complete $\mathcal{O}(\alpha)$ EW radiative corrections to $p_p^{(-)} \to W^\pm \to \ell^\pm \nu$ and multiple photon radiation.

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