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NLO+NLL limits on W' and Z' gauge boson masses in general extensions of the Standard Model

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QCD resummation predictions for the production of W' and Z' heavy gauge bosons decaying leptonically will be presented. The results of our resummation code at next-to-leading order and next-to-leading logarithmic accuracy will be compared to Monte Carlo predictions obtained with PYTHIA at leading order supplemented with parton showers and FEWZ at NLO and next-to-next-to-leading order for the p_T -differential and total cross sections in the Sequential Standard Model and general $SU(2) \times SU(2) \times U(1)$ models. Finally, new limits at NLO+NLL on W' and Z' boson masses obtained by reinterpreting recent ATLAS and CMS results in general extensions of the Standard Model will be presented.

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