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QCD backgrounds to dark matter searches at the LHC

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The sensitivities of Dark Matter (DM) searches at the LHC are rapidly becoming systematics limited. These searches must begin to leverage new methods for controlling systematic uncertainties in order to fully exploit the 300 fb-1 anticipated in Run-2. The most crucial and challenging uncertainties to control are associated with standard model backgrounds, such as $Z(\nu\bar{\nu}) + \text{jets}$, that give rise to significant missing energy (MET) at large rate. In this talk I will review how such backgrounds are treated in present-day DM searches at the LHC. I will then discuss new techniques that promise to substantially reduce large-MET background uncertainties by means of precise QCD and electroweak calculations

Primary author: Prof. HAHN, Kristian (Northwestern Univ.)

Presenter: Prof. HAHN, Kristian (Northwestern Univ.)

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