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## Resummation Effects in Semi-Inclusive neutralino Annihilation

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WIMP dark matter is still one of the better motivated candidates and its indirect observation via the products of its annihilation entails some of the largest experimental efforts nowadays. The correct observable to describing the high-energy photon spectrum from WIMP annihilation is the semi-inclusive process  $\chi\chi \rightarrow \gamma + X$ . In TeV-scale dark matter scenarios, non-perturbative effects arise due to the Sommerfeld effect as well as large Sudakov double-logarithms. We have expanded existing frameworks describing semi-inclusive DM annihilation with Sommerfeld effect in the MSSM to include NLL resummation of large Sudakov double logarithms for arbitrarily mixed neutralino DM candidates. In my talk I give an overview of our EFT approach to compute the DM annihilation cross-section into photons to  $\sim \mathcal{O}(5\%)$  accuracy.

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