Contribution ID: **93** Type: **Talk**

# Bracketing the impact of astrophysical uncertainties on dark matter searches

*Wednesday 29 August 2018 17:00 (15 minutes)*

The theoretical interpretation of dark matter experiments is hindered by uncertainties of the dark matter density and velocity distribution inside the Solar System. In order to quantify those uncertainties, we present a parameter that characterizes the deviation of the true velocity distribution from the Maxwell-Boltzmann form, and we then determine for different values of this parameter the most aggressive and most conservative limits on the dark matter scattering cross section with nuclei. This allows us to bracket, in a model independent way, the impact of the astrophysical uncertainties on the interpretation of null search results from direct detection experiments and/or neutrino telescopes.

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**Session Classification:** Dark Matter

**Track Classification:** Dark Matter