

# Formation models for antideuterons from dark matter

*Tuesday, September 13, 2016 5:50 PM (20 minutes)*

Antideuterons are a potential messenger for dark matter annihilation or decay in our own galaxy, with very low backgrounds expected from astrophysical processes. The standard coalescence model of antideuteron formation, while simple to implement, has potentially large uncertainties from Monte Carlo modelling, and is under considerable strain by recent data from the LHC. We suggest two new approaches: i) a model where the uncertainties are better quantified, and ii), a model which is better able to cope with the new data.

## Summary

**Primary author:** RAKLEV, Are (University of Oslo (NO))

**Presenter:** RAKLEV, Are (University of Oslo (NO))

**Session Classification:** Dark matter (indirect detection)

**Track Classification:** Dark matter (indirect detection)