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## Nonperturbative Dynamics in Dark Matter Freezeout

*Monday 4 July 2016 15:00 (20 minutes)*

I discuss the cosmological impact of dark matter bound state formation in the early universe in the context of complete simplified models of dark matter interactions. In particular, I show that the effects of relativity on the nature and behavior of these bound states are important to correctly describe the physics in cases of interest. I continue on to discuss the implications of these interactions for the parameter space of well-motivated models of dark matter, especially in the context of unitarity considerations which lead to upper bounds on the mass of thermal dark matter.

**Author:** SHEPHERD, William (University of Copenhagen)

**Presenter:** SHEPHERD, William (University of Copenhagen)

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