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Abstract for an Invited Paper  
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**Huge bound states of dark matter?<sup>1</sup>**

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An attractive force in an asymmetric dark matter (ADM) sector can lead to ADM bound states of very large size, called nuggets. I'll discuss the nuclear structure of such ADM nuggets and their synthesis in the early Universe, along with astrophysical constraints on this scenario. ADM nuggets represent a qualitatively new sort of dark matter candidate: they lead to a broad dark matter mass function, and their proclivity for cold fusion dramatically affects the character of dark matter self interactions.

<sup>1</sup>based on work with Hou Keong Lou and Kathryn Zurek