

Abstract Submitted  
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**Has Dark Matter Finally Been Detected?** LIONEL D. HEWETT,  
Texas A&M University-Kingsville — Analysis of a recently discovered 3.5 keV X-ray spectral line coming from various external galaxies suggests that its source of radiation may well be the dark matter contained in the halo of the galaxies. If this suspicion is confirmed, then the natural question is, “What kind of particle could be responsible for this radiation?” Several candidates have been suggested (some of which are quite exotic) but the simplest explanation could well be the quantized remnant of primordial black holes. This presentation discusses why such quantized remnants are expected to exist and why they would have precisely the properties necessary to explain not only cold dark matter but also this recently observed X-ray spectral line.

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