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Dark Matter – What Is It, Where Does It Come From, And Why Is It Cold? LIONEL D. HEWETT, Texas A&M University-Kingsville — One of the most perplexing mysteries of modern cosmology is dark matter. It can be observed today only through the orbital mechanics of galaxies and the bending of light rays. And in the early universe it was required to produce the gravitational pockets necessary for the formation galaxies. But neither the extremely successful Λ-CDM model of cosmology nor the widely accepted inflationary theory of cosmology provide any clue as to why dark matter should exist or exhibit such unusual properties. On the other hand, Time-Symmetric Cosmology not only identifies dark matter to be the remnant of primordial black holes that emerged from the first physical events following creation but also explains how dark matter began cold and was able to remained cold even during the primordial universe when temperatures were hot enough to prevent quarks from condensing into nucleons.

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