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Dark Matter Explained: Exploring shadows on the cave wall JAMES BEICHLER, West Virginia University at Parkersburg — Science has been faced with an unknown in its theories of the universe for more than two decades. The observed reality of CDM in the galactic halos presents a crisis for science because the present paradigms of physics cannot explain its existence. The quantum solution is to assume that some form of esoteric heavy particles, such as WIMPs, MACHOs or supersymmetry particles, will eventually account for Dark Matter. However, their existence has never been verified. Or a modification of Newton's basic laws of motion called MOND has also been proposed. Yet adding a specialized 'fudge-factor' to Newton's fundamental laws of motion merely to save appearances seems questionable. The CDM problem affects gravity theory, not the laws of motion. The problem is relativistic in nature and a relativistic solution is easily found with only a slight change of approach, but that change is radical and not without consequences. The addition of a macroscopically extended fourth spatial dimension to our present four-dimensional space-time world structure explains CDM, but this would amount to the acceptance of the reality of a five-dimensional space-time continuum.

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