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Abstract for an Invited Paper for the PSF17 Meeting of the American Physical Society

Dark Matter: Where Cosmology Meets Particle Physics

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Cosmological measurements and astrophysical observations point to the presence of new particles, quot;Dark Matterquot;, which do not have significant interactions with the normal particles of the Standard Model of Particle Physics. This is one of the most striking indications that the Standard Model is incomplete - I will outline the evidence for dark matter and highlight a selection of different theories which endeavour to explain the nature and origin of dark matter.