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Dark Matter in the Cosmos and in the Laboratory

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80% of the matter in the universe is “dark matter,” a neutral, diffuse, and weakly-interacting material made of an unknown elementary particle. In this colloquium, I will explain how we know this, and how we might try to directly observe dark matter particles in the galaxy. I will then examine dark matter from a particle physicist’s viewpoint and explain how we will use data from high-energy particle colliders to discover and identify the dark matter particle.