

# Detecting Dark Matter: Overview, Issues, and Perspectives

*Monday 29 September 2014 09:15 (1 hour)*

With overwhelming evidence via gravitational observations that the preponderance of mass in the universe is in a new, unseen, and as-yet undetermined form of matter, the quest is on to identify this “dark” matter. A new type of particle(s) is the leading candidate for this dark matter. I will discuss various particle candidates, with a focus on those that have a small (weak), but non-zero interaction with ordinary matter. The three main modes of detecting such particles—collider, direct, and indirect searches—and their current status will be presented. I will discuss various issues to be addressed and provide my perspectives on the future of the dark matter field.

**Presenter:** SAVAGE, Chris