

New Electron Fixed Target Experiments to Search for Light Dark Matter

Monday, 11 July 2016 14:30 (50 minutes)

This talk analyzes the present status of sub-GeV thermal dark matter annihilating through Standard Model mixing. In these scenarios, the requirement that dark matter be a thermal relic sets a sharp sensitivity target for terrestrial experiments, and that one of the simplest and best-motivated interactions between the SM and light dark matter the vector portal remains viable. Moreover, it is demonstrated that a small set of future experiments that can decisively test these models. The talk will emphasize electron beam fixed target experiments but will also survey other techniques.

Presenter: KRNJAIC, Gordan (Fermilab)

Session Classification: Afternoon Session