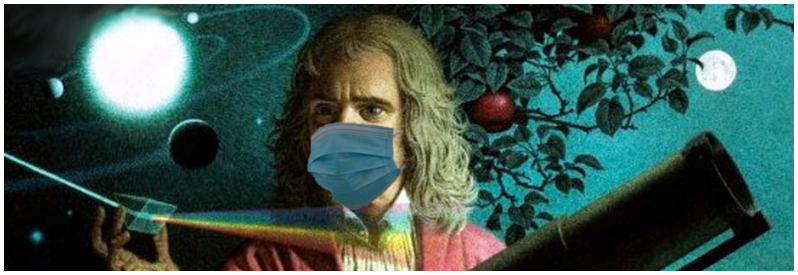

Contribution ID: **128** Type: **not specified**

Dark Matter Direct(ional) Detection at the High Mass Frontier

Monday, March 1, 2021 5:00 PM (30 minutes)

https://inspirehep.net/literature/1711233
I will show that, via dedicated searches for dark matter scattering multiple times in transit, masses up to the Planck mass can be probed in current and future direct detection experiments. Moreover, this reach can be extended by a few orders of magnitude at the liquid scintillator neutrino detectors BOREXINO, SNO+, and JUNO via dedicated selection triggers. Multiscatter/track searches would also directly reconstruct the dark matter velocity distribution, hence determine the dispersion speed, escape speed, and velocity anisotropies of the Galactic halo.

Presenter: RAJ, Nirmal