## **Workshop on Very Light Dark Matter 2023**



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## **Dark Matter and Quantum Gravity**

Tuesday, 28 March 2023 11:05 (40 minutes)

Recent studies in the Swampland Program are pointing a possibility that quantum gravity constraints can be used to curve out the vast theory space of dark matters theoretically. In this talk, I will introduce our recent attempts to this direction based on unitarity of gravitational scattering amplitudes. In particular, I will discuss dark photon scenarios as an illustrative example and also provide prospects on applications to other dark matter scenarios.

Presenter: NOUMI, Toshifumi

Session Classification: Morning session-1