

## **keV scale sterile neutrino Dark Matter - theories and implications for experiment**

Fedor Bezrukov - University of Connecticut (*UConn*)

Abstract:

An interesting candidate for the Dark Matter is a light sterile neutrino. It is superweakly interacting, is present in the most minimal extensions of the SM required to explain the experimental observations. I will discuss the simplest model, nuMSM, which can explain all the observed experimental facts, which can not be described within the Standard Model particle physics -- Dark Matter, baryon asymmetry of the Universe, neutrino oscillations. I will also comment about other models with sterile neutrino as dark matter. I will emphasize which consequences these models have for the laboratory experiments and astrophysical observations.