



Institute for Research in Fundamental Sciences, School of Astronomy

PHD DEFENSE SESSION

COSMOLOGICAL ASPECTS OF DARK PHOTONS AND AXIONS

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Abstract The main topic of this thesis is about dark matter models from cosmological point of view. I will first review general topics about cosmology and dark matter. Next, I will review our proposed model for dark photon dark matter from cosmic inflation. Another, important dark matter model is the axion field or more general scalar dark matter. We will obtain an effective theory for this model. Finally, we will discuss consequences of the coupling between axion and dark photons including a possible probe via gravitational waves.

Date-Time July 11, 2021 (20 Tir, 1400) - 10:00 AM.

Location Virtual seminar via skyroom platform
<https://www.skyroom.online/ch/soa/borna-salehian>