



Lectures on

Dark photon dark matter from inflation

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In a series of three one-hour blackboard lectures I plan to introduce pedagogically a new non-thermal mechanism for dark matter production which I explored recently with my collaborators. First, I will review some basics of inflation driven by a scalar field. Second, I will couple the scalar field to an abelian gauge field (the dark photon), consider the dynamics of the system, and show that it leads to the production of a significant energy density of the dark photon. Third, I will follow the evolution of this energy density through the expansion of the Universe.

25th to 27th March, 2019
9-10 a.m.

Seminar room bctp 1 (2.019)

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