

Abstract Submitted  
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**Non-minimally coupled quartic inflation with radiative corrections in the Palatini formulation** NILAY BOSTAN, The University of Iowa — In this talk, we discuss how the non-minimal coupling  $\xi\phi^2R$  between the inflaton and the Ricci scalar affects the predictions of single-field inflation models in the Palatini formulation. Interaction between the inflaton and other fields lead to radiative corrections in the inflationary potential. These radiative corrections can be expressed at leading order Coleman-Weinberg (CW) one-loop corrections. The impact of these corrections to the inflationary potential have been investigated by using two different prescriptions discussed in the literature. We show the range of coupling parameters between couplings of the inflaton to bosons and fermions for which the spectral index  $n_s$  and the tensor-to-scalar ratio  $r$  are compatible with data taken by the Keck Array/BICEP2 and Planck collaborations.

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