

# Do we understand early universe cosmology?

## Speaker

Prof. Robert Brandenberger  
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## Date and Time

21 May 2025, 6-7:30pm Tehran timezone

## Abstract

I will argue that the usual effective field theory techniques break down in the rapidly expanding background of the early universe. The TCC ("Trans-Planckian Censorship Criterion") plays a key role in the argument. I will then discuss an attempt to obtain an emerging metric space-time and early universe cosmology starting from a quantum mechanical matrix model.

## Link

<https://www.skyroom.online/ch/schoolofphysics/colloquium>

