

Timestamp	Lecture	Slide No.	My Question						
8/19/2021 12:	1	some thermal relic nume	What is capital H?						
8/19/2021 12:	1	16	can you explain the shape of the line once more please?						
8/19/2021 12:.	1	Nonminimal Cosmology	This is kind of a more general cosmology question, but what would the implications of early matter domination on "late" time observables like $N_{\text{eff}}$ be? (Presuming light DM)						
8/19/2021 12:.	1		Can you provide some representative numbers on a and h axes in non-minimal cosmology?						
8/19/2021 12:.	1		On slide 31 you say that the Z2 symmetry renders S stable; what happens if S gets a vev? Is this still true & how would the rest of the development be altered?						
8/19/2021 12:.	1	Last slide	What is the difference between cross-over transition and second-order transition (if any)?						
8/19/2021 12:.	1		2HDM Type-I inert Higgs seems to be a rather economical model for DM but not so much literature on that compared to e.g. 2HDM+a. Any known difficulties to meet some constraints ?						
8/20/2021 11:52:31	2	singlet potential	Can the pure singlet piece in the potential be shifted away via field redefinition?						
8/20/2021 12:09:26	2	light scalar lifetime	What causes the steps in the decay length vs mass plot that you show?						
8/20/2021 12:19:18	2	dark Higgs	Does the dark Higgs give mass to dark matter?						
8/20/2021 12:20:39	2	Long-lived particles in dark sector	What's the rules for $Z_D$ decays ? Similar to Z or can have very different BR ?						
8/20/2021 12:34:45	2	LLP	If LLP are observed at, eg. FASER, how will the parent process be identified?						
8/20/2021 12:40:23	2	Higgs decays to LLP	For the composition dark scalar G0 decays, what's the decay rules for BR ?						
8/20/2021 12:40:44	2	LLP	Do LLP searches assume they are electrically neutral so that they can make it through the LHC detectors?						
8/20/2021 12:41:42	2	next to last	What hierarchy of lifetimes can we expect to observe?						