

panel discussion

Early Universe ($z > 7$)

panelists:

Anthony Challinor,
Valerie Domcke,
Daniel Figuerao,
Helena Kolesova,
Joulien Lesgourges,
Arttu Rajantie

chairs:

Gabriele Franciolini,
Jacopo Ghiglieri,
Mikhail Shaposhnikov,
Jorinde van de Vis

Are the observed
cosmological tensions
(Hubble, σ_8 , lithium
problem) new physics,
systematics, or poorly
understood SM physics?

How to disentangle GWs
from different stochastic
backgrounds? How to
distinguish astrophysical
processes from BSM effects?

What are the
consequences of the
recent ACT results for
models of inflation?

What are the most promising
upcoming results in
CMB/neutrino
experiments/GW
detectors/DM searches?

**Are the GWs observed by
PTAs sourced by new
physics? What would it take
to confirm this? What is the
timeline for that?**

**What are the prospects for
21cm physics? What new
knowledge do you hope we
will obtain from upcoming
experiments?**

Is there a cosmic dipole anomaly?

How certain are we that the
SM QCD and electroweak
phase transitions are
cross-overs?

Can lattice answer this
question?

Suppose that we observe
monopoles at MoEDAL, how
would we have to change
our cosmological models?

What are the prospects for
establishing the neutrino
mass hierarchy with
cosmological observations?