

# From the Hubble tension to the Harrison-Zeldovich spectrum

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An exact scale-invariant Harrison-Zeldovich spectrum, i.e.  $n_s = 1$ , has been ruled out at  $8.4\sigma$  level according to Planck results. However, the situation changes when we consider the Hubble tension. Extra energy injection in early cosmology (e.g. Early Dark Energy), which is a class of promising solutions of the Hubble tension, seems to call for the return of  $n_s = 1$ . Using recent observational data, we show strong evidence for  $n_s = 1$  if the Hubble tension is resolved in this way. Furthermore, we show how these solutions can affect the observation constraints on the  $r$ - $n_s$  plane, bringing unforeseen impacts to the inflation model.

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