

First neutrino results from the Dark Energy Spectroscopic Instrument

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In its first year of operation, the Dark Energy Spectroscopic Instrument (DESI) has measured the spectra of more than 6 million extragalactic objects. These spectra enable precision measurements of the large-scale distribution of matter in the Universe. One of the key measurements made by DESI is that of the baryon acoustic oscillation scale, which, in combination with measurements of the cosmic microwave background, lead to the strongest current constraints on the sum of neutrino masses and the effective number of neutrino species. In this talk, I will give an overview of the DESI experiment, present its Year 1 cosmological results, and discuss their implications for neutrino physics. I will also give an outlook on other measurements that DESI could make to further strengthen these bounds.

Poster prize

Given name

Surname

First affiliation

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Gender

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