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Hubble tension, dark matter and neutrino

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In the CDM universe, the Hubble constant is the only cosmological parameter that can be measured both locally and indirectly by traditional cosmological methods like the CMB, baryon acoustic oscillations, supernovae, and big-bang nucleosynthesis. It is also simple to comprehend, and because the error bars are getting so narrow, the CDM model truly depends on it. Everyone awoke as a result of the Hubble stress. But we need more before we throw the model out the window. Most of the observations we have of the cosmos can be explained by a model with only six parameters, most of which are limited at the percent level. We have been riding a tsunami of CDM model confirmation for the past 20 years, so we must ask ourselves: If we are going to get rid of it, what do we replace it with? The first stage is to depart from the model in small steps, such as by adding one additional parameter. A solution like this used to suit the CMB data, but it no longer does. For a while, one could argue that perhaps there is something like an effective neutrino species that could solve the problem.

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