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**Precision Cosmology: Past Successes and Future Prospects**

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We now have a Standard Model of cosmology, with all the well-earned pride and possible hubris that entails. We have measured the main cosmological parameters to accuracies of a few percent, and we have even tested inflation theories. But there are some pesky mysteries: dark matter and dark energy, and an apparent deficit of spatial fluctuations on the largest angular scales. And the great current challenge is testing whether gravitational waves were important in the early universe. Then, what happened to produce the galaxies, the black holes, and the remarkable complexity of astrophysics? Combining new measurements and new simulations, we have great hopes to understand a little better, and with luck, to aid in the search for the Theory of Everything, if it exists. I will sketch the history and predict the future.