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Visualizing the Universe (Part I)

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These decades are the first in which we can begin to map the universe. Recent surveys reveal patterns in the distribution of galaxies — patterns coherent on scales of 150 million light years or more. These patterns contrast with the smoothness of the radiation background measured by the COBE satellite. Together these observations challenge our understanding of the origin of galaxies and large-scale structure in the universe.

"Visualizing the universe" is crucial for exploring the 3-dimensional maps, for analyzing them, for comparing the data with simulations, for designing instruments to make deeper maps with new large telescopes, and for sharing the excitement of discovery with the public.