

Plenary Talk

THE ERA OF LARGE-SCALE COSMOLOGICAL
SIMULATIONS: EXPLORING LARGE AND SMALL SCALES
SIMULTANEOUSLY

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Progress in our understanding of galaxy formation, improved numerical algorithms, and increased computing power have recently lead to a number of impressive large-scale hydrodynamical simulations, which are able to reproduce key observables of the local and higher redshift Universe. These simulations allow us, for the first time, to study the interplay between large-scale structure and galaxy formation in detail. I will present recent results of these efforts and discuss some successes and failures of them.