

Exploring the Early Universe with Computer Simulations

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My team and I study the young Universe before it evolved into the stars and galaxies we see today. Starting with fundamental physics, we develop simulations to model gas, galaxies, and light. We allow them to run through the first quarter of the lifetime of the Universe and then compare the results to observations made with modern telescopes. In this talk, I will briefly describe the early Universe, show how we perform our simulations, and discuss how close we are to accurately simulating what observers are seeing.

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