

## Simulating the formation of the first stars

The first stars are thought to have formed a few hundred million years after the big bang, lighting up the Universe for the first time and enriching the intergalactic medium with the first heavy elements. Since their properties depend sensitively on their masses, the holy grail has been to derive the initial mass function of the first stars from first principles. I will discuss recent progress on this path due to improvements in numerical simulation methods. It has become feasible to simulate the entire range of scales involved for a significant period of time beyond the formation of the first protostar, and simultaneously increase the degree of physical realism. Some as of yet incompletely understood phenomena are the influence of magnetic fields and radiative heating. With the launch of JWST within reach, these results can be verified by upcoming observational campaigns.

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### Talk/Poster

Talk

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