

Stellar Evolution of Pop III and EMP Binaries

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Modern cosmological simulations suggest that one massive Pop-III star might form into multi stars due to the fragmentations of the star-forming cloud. Most of these stars are likely to develop into binaries instead of single isolated stars. In the case of close binaries, the interaction between two stars frequently occurs. It leads to drive a significant mass-transfer even affect the fate of the two stars. In this poster, I will show the results of our stellar evolution models of Pop-III/EMP binaries with MESA and discuss their physical properties. The results suggest that mass-transfer can dramatically affect the evolution track and the fate of these binaries. Therefore, the stellar feedback of Pop-III/EMP binaries may have a profound impact on the early Universe.

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Talk/Poster

Poster

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