

Talk at Splinter Meeting

Splinter F

## TURN-OFF PRIMORDIAL STARS

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The extremely metal-poor stars (EMP) hold in their atmospheres the fossil record of the chemical composition of the early phases of the Galactic evolution. The chemical analysis of such objects provides important constraints on these early phases. The chemical composition of EMP stars can give insight on the star-formation of low-mass stars from a metal-poor gas and on the masses of the Pop.III first-generation massive stars. EMP stars are very rare objects; to dig them out large amounts of data have to be considered. A large fraction of EMP stars are C-enhanced and the smaller  $[\text{Fe}/\text{H}]$  value the highest is the fraction of CEMP stars in the sample of EMP stars. With an automatic procedure, we analysed objects with colours of Turn-Off stars from the Sloan Digital Sky Survey to select a sample of good candidate EMP stars. With the spectrograph X-Shooter and UVES, we observed a sample of these candidates and derived their chemical composition with particular attention to carbon.