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On the age-dating of old field stars

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An accurate dating of bulge and halo field populations allows to gauge at which lookback (i.e., at which redshift) one should look for possible analogs of the Milky Way, when their bulge and halo formation process were about to start, well on their way, or even already concluded. However, dating field stellar populations is a very complicated task, generally challenged by the uncertainties in the distance modulus, and the metallicity dispersion. The case of the bulge stellar population is even more difficult due to the stellar crowding, the patchy and highly variable extinction, the distance spread due to the spatial depth of the bar along the line of sight and finally the contamination by foreground disk stars. I will review the commonly used methods to derive the age of field stars, with a particular emphasis on the bulge stellar populations.

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Session Classification: Ages of the oldest stars and the connection to the halo and accretion