

A SYNOPTIC VIEW OF THE MAGELLANIC CLOUDS:  
VMC, GAIA AND BEYOND

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## **Stellar evolution and stellar populations**

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I will overview how the theory of stellar evolution and stellar populations evolved to explain the rich features observed in large surveys of the Magellanic Clouds – going from subtle features in colour-magnitude diagrams to striking sequences in period-magnitude diagrams. Particularly interesting nowadays is the comparison with more metal rich populations, allowed by Gaia and HST observations of big spirals, and the striking details provided by the HST photometry of star clusters. They are opening the way for calibrating the processes producing core growth, dredge up, and mass loss, especially in low and intermediate-mass stars.