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

ESO-HQ, GARCHING BEI MÜNCHEN, GERMANY September 9-13, 2019

The Star-Formation History of the Magellanic Clouds

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The star-formation history (SFH) of a galaxy preserves a record of the ISM gas, stellar populations, chemical enrichment cycle over the entire starforming history of the system. In unquenched galaxies like the Magellanic Clouds this record covers the entire Hubble time, from the oldest surviving stars to current HII regions. As the nearest pair of interacting, gas-rich galaxies, the Magellanic Clouds are a natural laboratory to investigate links between star formation rate, chemical enrichment, galaxy mass, morphology, and interactions. In this review I will discuss what has been learned about the SFH and the associated age-metallicity relations and population gradients since the advent of resolved stellar photometry to magnitudes significantly below the oldest main-squence turnoffs. The combination of deep, pencil-beam color-magnitude diagrams from space with high-fidelity, widefield imaging from the ground is the key development for understanding the global SFH of the Magellanic system. I will discuss the role of massive spectroscopic surveys and the role of the Clouds as archetypes for more distant, unresolved systems.