

A SYNOPTIC VIEW OF THE MAGELLANIC CLOUDS:  
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## Dissecting the SMC

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One of the key puzzles in modern astrophysics is to understand how galaxies form and evolve. In particular, interactions are important drivers of galaxy formation and evolution. Hence, studying these encounters within our Local Group systems, where we can resolve individual stars, can help us understand these processes. Due to their proximity, our closest interacting pair, the Magellanic Clouds, constitute an excellent workplace to carry out these studies. With the aim of shedding light on this, I present here a detailed study of the surface brightness profile of the Small Magellanic Cloud using deep colour-magnitude diagrams, obtained from the Survey of the Magellanic Stellar History (SMASH). In addition to the photometric studies I also show the results from an extensive spectroscopic survey of field stars using data from the 2dF+ AAOmega at the Anglo Australian Telescope. Finally, I will present a comparison with in-house simulations in order to disentangle the stripping nature of the Small Magellanic Cloud's stars. Our work provides a comprehensive picture of the Small Magellanic Cloud and its interactions with the Large Magellanic Cloud and with our own Galaxy.