Galaxy evolution in a locally dense environment: the samall Magellanic cloud

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A Case Study of Galaxy Evolution in a Locally Dense Environment

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Abstract I present the global star formation history of the Small Magellanic Cloud as derived from an analysis of millions of field stars and from hundreds of stellar clusters. Multiple, coincident, bursts of star formation are identified in both the field and cluster population. I will compare the timing of those burst with orbital models of the Clouds about the Milky Way to draw conclusions regarding the importance and efficiency of tidal triggering of star formation in a close encounter that is not yet a direct merger. The star formation model will also be compared with the derived chemical enrichment history to draw conclusions about the validity of a closed-box model.