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Getting WISE on Star Formation

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Abstract content
 (Max 300 words)
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 Special chars

In order to understand the evolution of a galaxy, it is essential to determine its star formation properties as well as its growth in stellar mass over cosmic timescales. *WISE*, the all-sky, mid-infrared survey, affords us the opportunity to investigate both these parameters for galaxies with a wide range of morphologies, activity types, and stellar masses.

In this talk, I will discuss our investigation of the two WISE star formation indicators at 12 (W3) and 22 (W4) microns, using ancillary data from the *Spitzer* Infrared Nearby Galaxy Survey (SINGS).

I will present results on the reliability of W3 as a star formation indicator, introduce a new star formation rate (SFR) relation based on our analysis, as well as a comparison of existing SFR relations to our new relation.

I will also comment on future work to be done on the spatially detailed, albeit qualitative, analysis of a few selected well-resolved galaxies to investigate local star formation processes.

Apply to be considered for a student award (Yes / No)?

Yes

Level for award (Hons, MSc, PhD, N/A)?

MSc

Main supervisor (name and email) and his / her institution

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Yes

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