

STAR FORMATION IN A MAGNITUDE LIMITED SAMPLE OF INTERACTING GALAXIES

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We report on optical/near-IR spectroscopy and photometry of a magnitude limited sample of interacting pairs and merging galaxies and a control sample of apparently isolated galaxies (1,2). All observations were carried out at ESO, La Silla. When compared to the control sample, the interacting galaxies show only a moderate increase of star formation activity, in the central area typically a factor 2-3. Starburst activity seems to be very rare. Ongoing CO observations (Aalto, Horellou, Booth, Wiklind, Bergvall) indicate that these objects are not particularly rich in molecular gas. The interacting/merging galaxies have relatively high optical luminosities and high FIR luminosities and temperatures but these parameters are not correlated with other star formation signatures. We conclude that the interacting and merging galaxies in this sample, from the global star formation aspect, do not differ dramatically from scaled up versions of normal, isolated galaxies. This could suggest that many of the most lumino

components in interacting pairs could originate from multiple 'quiet' mergers.

References

1. Johansson, L., Bergvall, N. (1990), *Astron. Astrophys. Suppl. Ser.*, **86**, 167