

## GLOBAL PROPERTIES OF THE GALAXIES IN THE FCRAO EXTRAGALACTIC CO SURVEY

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We have examined the global properties of 250 galaxies and galaxy pairs observed as part of the Five College Radio Astronomy Observatory (FCRAO) Extragalactic CO Survey with respect to bar type and arm type, and we have compared the results with the global properties of the same galaxies as a function of morphological type. The bar types of the galaxies were taken from RC2, and the arm types for 48% of the sample were taken from Elmegreen and Elmegreen (1987). We find the following:

1) There is little dependence of the star formation efficiency, as measured by the global FIR luminosity to molecular gas mass ratio, on bar type. Similarly, we find no obvious correlation between the global ratio of molecular to atomic gas mass and the bar type.

2) Variations of up to a factor of 6 are seen in the mean star formation efficiency with arm type, where flocculent galaxies appear to have slightly higher *global* star formation efficiencies than spirals with clearly delineated arms. Variations in the mean molecular to atomic gas mass ratio of a factor of 5 are seen as a function of arm type, but there is no apparent trend from flocculent to grand design spirals.

3) The decrease of a factor of 20 in the molecular to atomic gas mass ratio observed as a function of morphological type (Young and Knezek 1989) is more pronounced than the same ratio as a function of bar or arm type.

### References

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