

[GC-47] Do Bars Trigger Activity in Galactic Nuclei?

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We investigate the connection between the presence of bars and AGN activity, using a volume-limited sample of $\sim 6,000$ late-type galaxies with axis ratio $b/a > 0.6$ and $M_r = -19.5 + 5 \log h$ at low redshift ($0.02 < z \leq 0.055$), selected from Sloan Digital Sky Survey Data Release 7. Although bars are believed to play an important role in fueling AGNs, it is still an open question whether AGN activity is connected with the presence of bars. We find that the bar fraction in AGN-host galaxies (44.1%) is 2.5 times higher than in non-AGN galaxies (17.6%), implying an AGN-bar connection. However, this trend is simply caused by the fact that AGN-host galaxies are on average more massive and redder than non-AGN galaxies since the bar fraction increases with $u-r$ color and velocity dispersion. When AGN-host and non-AGN galaxies with fixed $u-r$ color and velocity dispersion are compared, the excess of bar fraction in AGN-host galaxies disappears. Among AGN-host galaxies we find no strong difference of the Eddington ratio distributions between barred and non-barred systems. These results indicate that AGN activity is not directly connected with the presence of bars.

**[GC-48] Yonsei Evolutionary Population Synthesis (YEPS) :
 The 2011 Version**

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We present a new, year 2011 version of the Yonsei Evolutionary Population Synthesis (YEPS 2011) model for simple stellar populations. The standard YEPS employs the most up-to-date Yonsei-Yale stellar evolutionary tracks and the BaSeL flux libraries. The spectro-photometric model data of the entire parameter space are available at <http://web.yonsei.ac.kr/cosmic/data/YESP.htm>.