Why are HzRGs important?

Important for theories of galaxy formation:

- Earliest galaxies containing a supermassive ($\sim 10^9$ M$_\odot$) black hole

- Correlation between galaxy mass and BH mass $\Rightarrow$ progenitors of present day giant ellipticals

- Radio techniques are unaffected by dust

- HzRGs are 2–3 mag brighter than Lyman-break field galaxies $\Rightarrow$ spectral diagnostics for comparison with theoretical models

- Remarkable K-z correlation $\Rightarrow$ approx photometric redshift