# High-z Radio Galaxies

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- ID fraction of radio sources on POSS <u>decreases</u> with <u>steepening</u> radio spectral index $\Rightarrow$ steepest spectrum sources are more distant (Tielens et al. 1979)

- Simple explanation: radio k-correction (Cyg A spectrum)

- Two other processes augment this effect:
  - higher inverse Compton losses at high $z$ due to more intense CMB $\propto (1+z)^4$
  - $P : \alpha$ correlation $\Rightarrow$ strong Malmquist bias in radio surveys