

# A census of K-band galaxies from the UKIDSS Large Area Survey

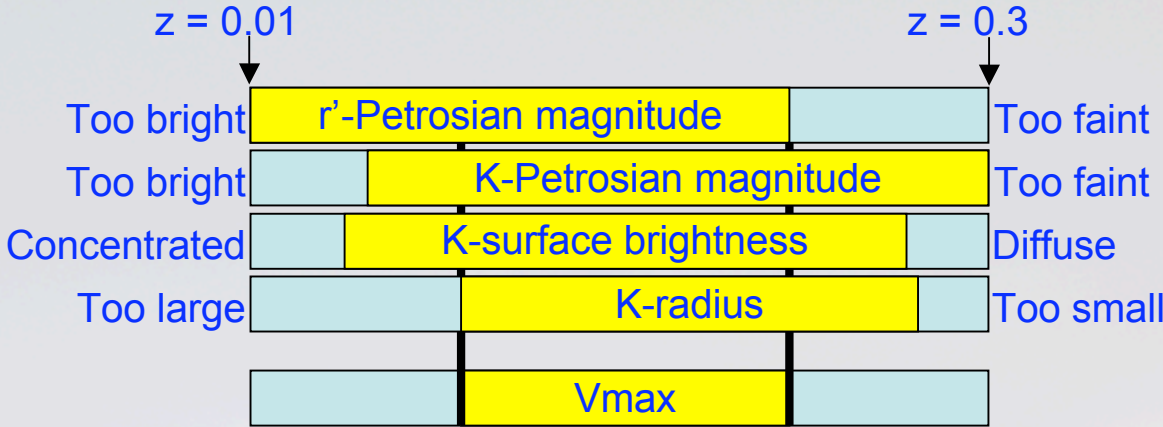
- ⌘ NIR: measuring stellar mass
- ⌘ Low-z: detailed, homogeneous

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- ⌘ UKIRT Infrared Deep Sky Survey
  - New generation of NIR surveys
- ⌘ LAS: overlaps with SDSS
- ⌘ 16k galaxies (400k by end 2009)

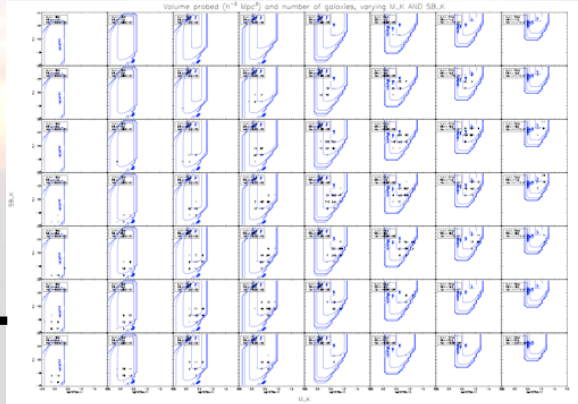
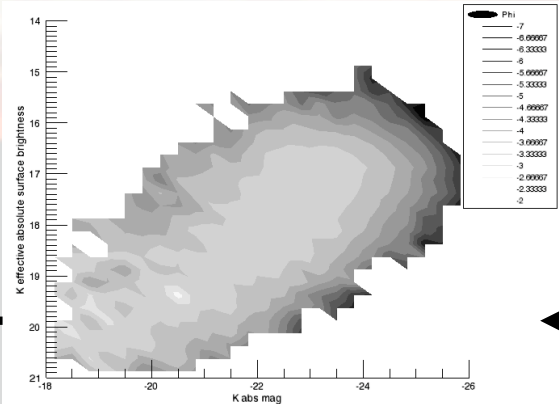
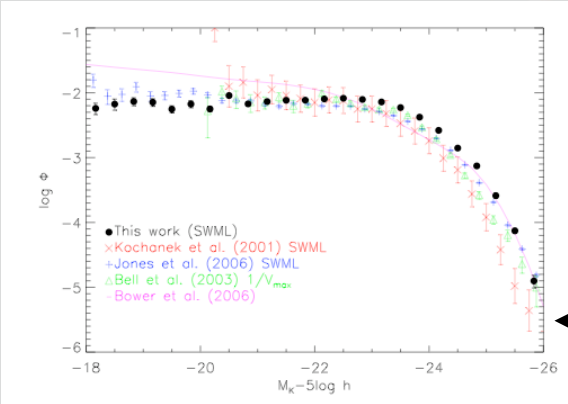
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- ⌘ Multivariate (4-D) version of luminosity function
  - 1/Vmax & SWML methods



Taking all selection effects into account

$\phi(M_r, M_K, \mu_K, R_K)$



**K-band luminosity function + K-band surface brightness + radius + r-band luminosity**