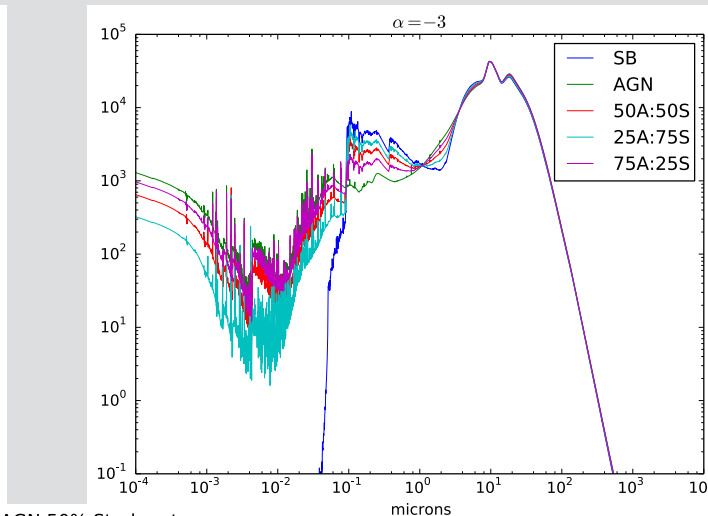
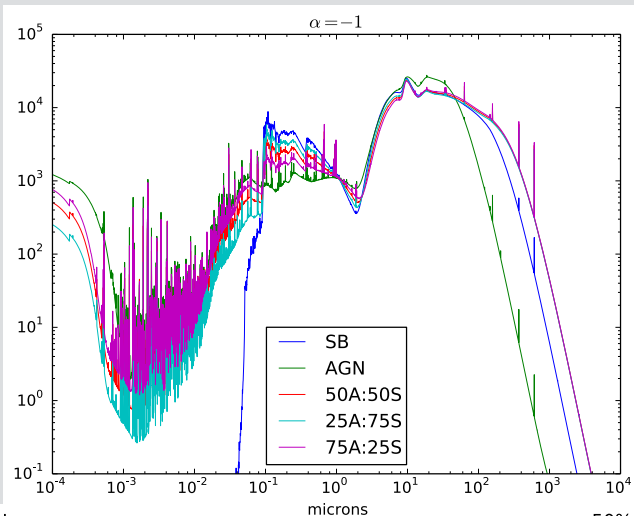


# Starburst or AGN driven wind?

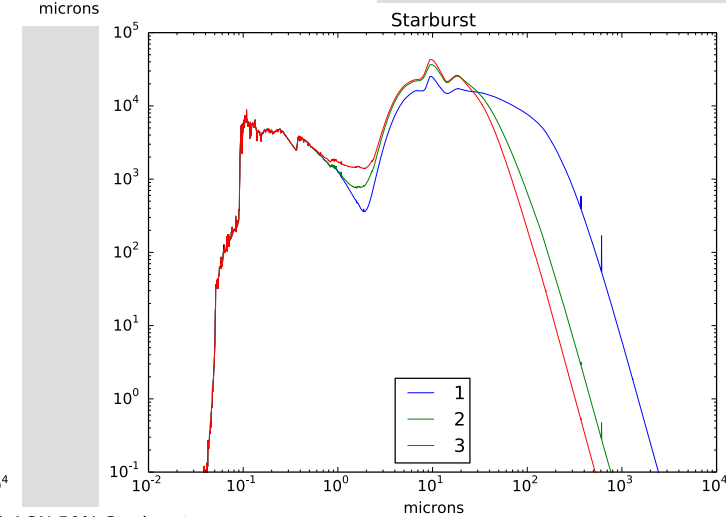
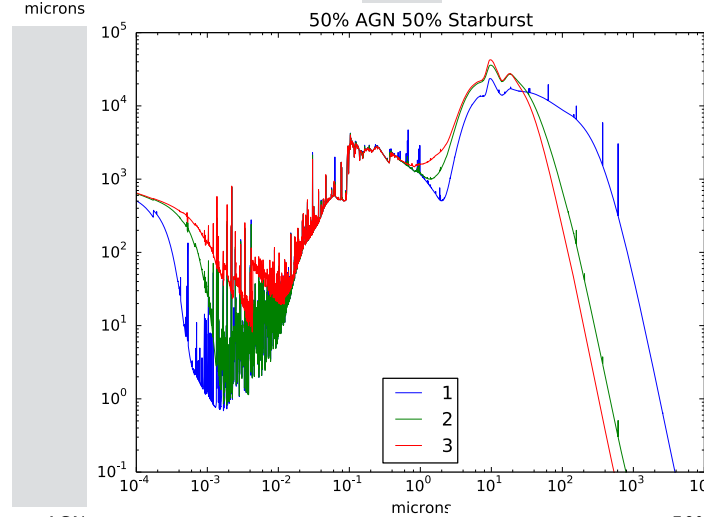
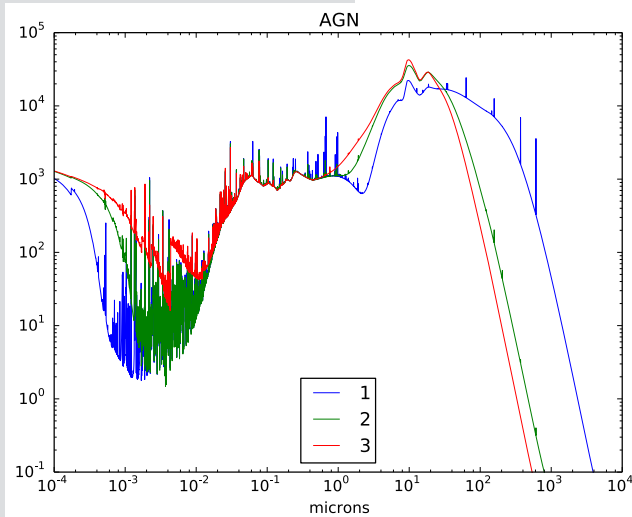
We explored whether there are clear diagnostics differences between an AGN and a Starburst driven outflow from a galaxy.

We modelled three different density profiles ( $\alpha=-1,-2$  and  $-3$ ) from  $n_H=10^3 \text{ cm}^{-3}$  at  $10\text{pc}$  out to  $n_H=10^0 \text{ cm}^{-3}$ .

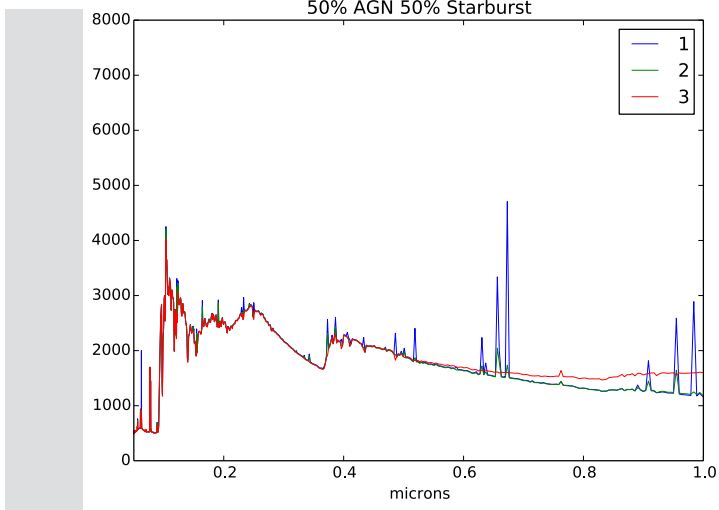
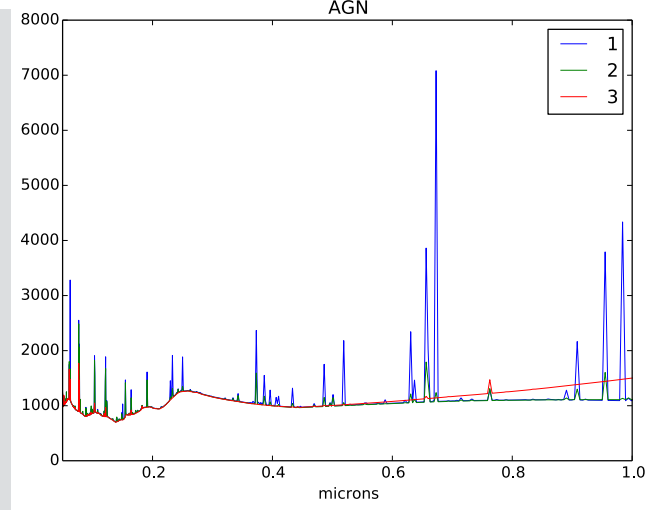


For each density profile we modelled a range of input SEDs, from 100% starburst to 100% AGN in 25% steps. The combined total bolometric luminosity was maintained at  $10^{45} \text{ ergs}^{-1}$ .

We made use of the inbuilt AGN SED and a 7 million year old starburst from Starburst 99.



We obtained unexpected results in the optical region, in particular we have very faint or non-existent [O III] lines due to a very low oxygen ionisation parameter. This was most prevalent in the starburst models and could be due to a confusion over the syntax of the stellar age option in the Cloudy input file.



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