## ASTR 541 - Interstellar Medium

Problem Set 5 Tom Wagg

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For reference, if you'd ever like to see the code that I've used to get my answers to these, here's a link to my GitHub repo! (#astropy.units for life)

## 1. Spectroscopy

z=0.1657 583.826, 459.247

ratio = 1.27, low density?

OII=14772.4, 2715.04 (Hbeta)

NII=130.103, Halpha=9469.3

Second file z=0.22833

SII: 18.8138, 14.4956: ratio=1.298, low density

OIII: 16.6357, Hbeta=36.7896 NII=83.1522, Halpha=150.604