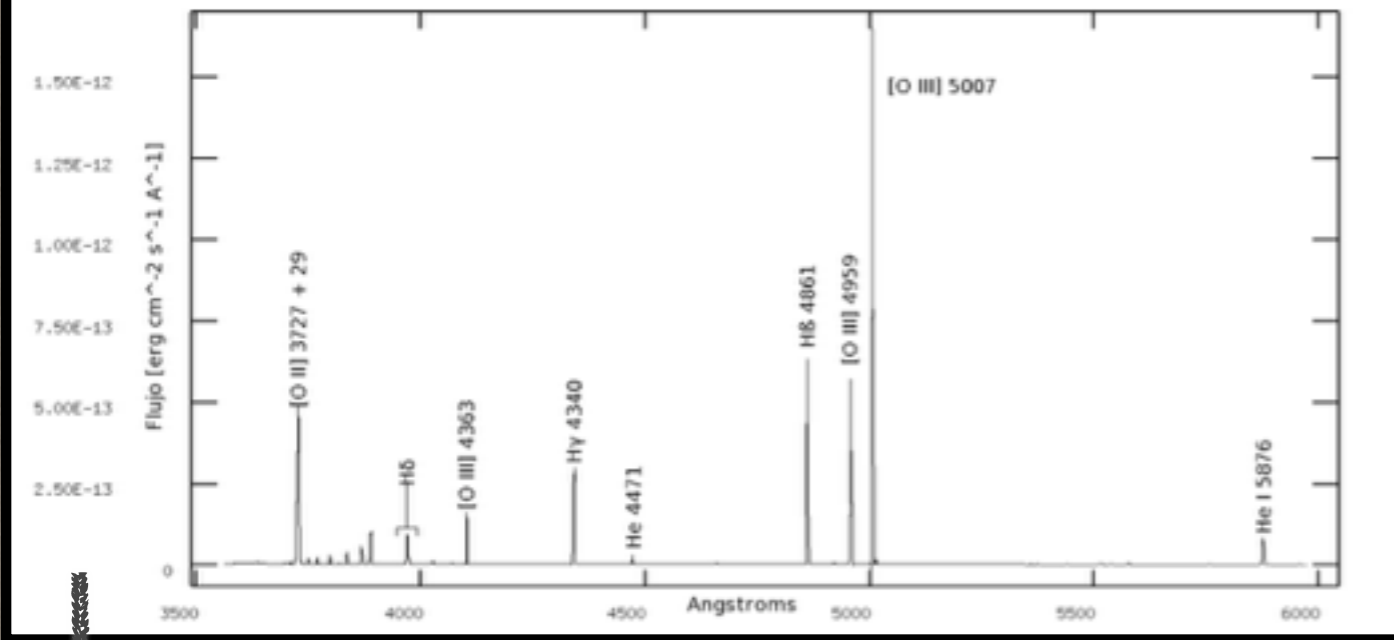


# Chemical composition in photoionized regions

J. Andrés Sixtos González

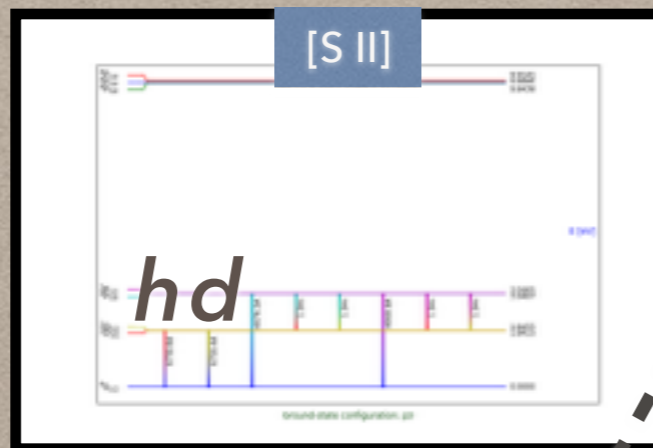
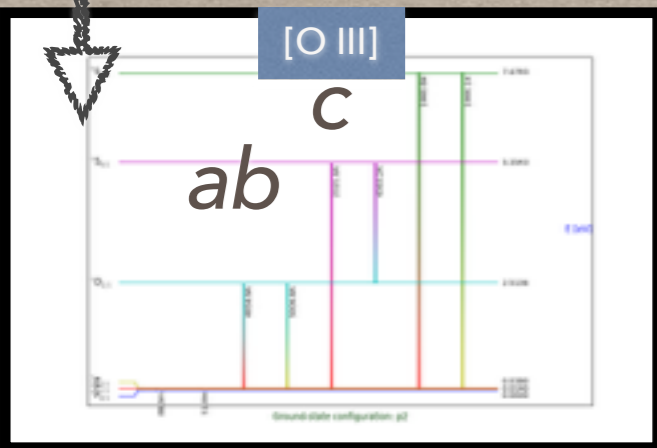


Chemical abundances

$$ADF(X^{+i}) = \frac{X_{RLs}^{+i}}{X_{CELs}^{+i}}$$

Which ones are the real chemical abundance?

Which ones are real physical conditions?



Temperature line ratio:  $\frac{a + b}{c}$

Density line ratio:  $\frac{d}{h}$

Modeling by software

**IRAF**  
Image Reduction and Analysis Facility

PyNeb

