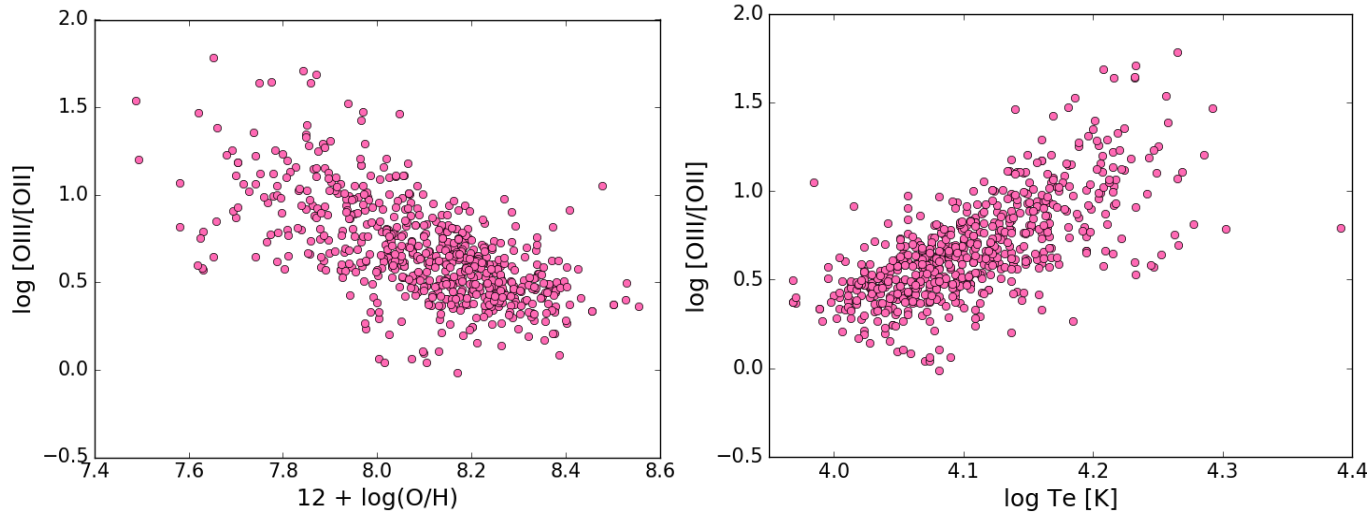


Spectral Diagnostics of Green Peas



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Green pea galaxies are the best analogs of high-redshift Lyman-alpha emitting galaxies (Yang et al. 2017a, etc.).



Research interests:

Extragalactic astronomy;
emission line galaxies; data
science in astronomy, etc.

- The physical origin of large $[OIII]/[OII]$?
- BPASS binary model can predict line ratios better?

Why using Cloudy?

to compare photoionization models
with observed emission lines

Why I am here ?

Known knows 🤔

Known unknowns 😊

- 1) How does the geometry of HII regions affect the line ratios?
 - 2) How good is the approximation of one HII region for a whole SF galaxy?
 - 3) Cloudy automatically divides the cloud into many zones. Adjusted manually?
 - 4) Density spatial distribution in HII region? Assumption of constant density?
- And More!

Unknown unknowns 😬

unknown issues (something could be wrong!)

unknown benefits (something could be better or more efficient!)

*Let's learn
about
modelling
ionized gas!
Have fun!*