Combined models of gaseous nebulae

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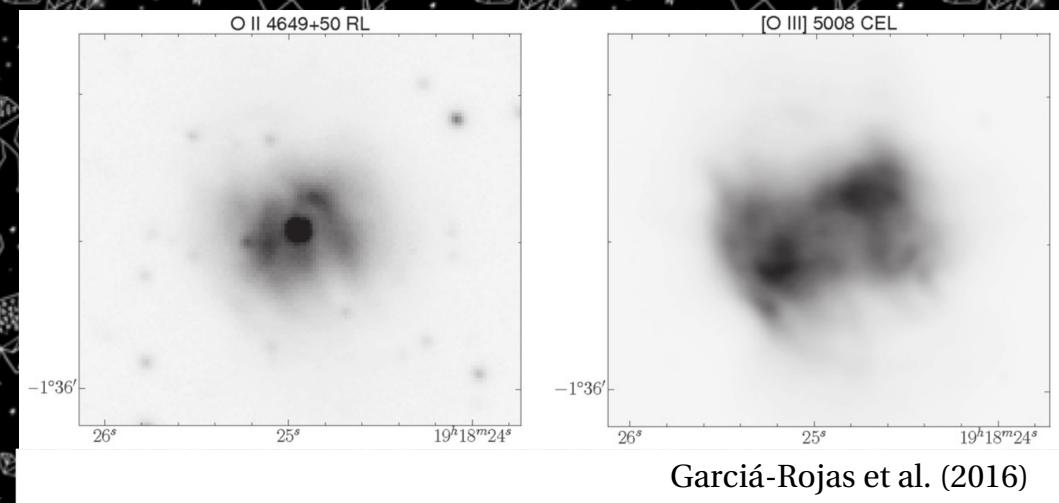
NGC 6778

Abundance discrepancy problem:

$$(X^{+i}/H^+)_{ORLs} \neq (X^{+i}/H^+)_{CELs}$$

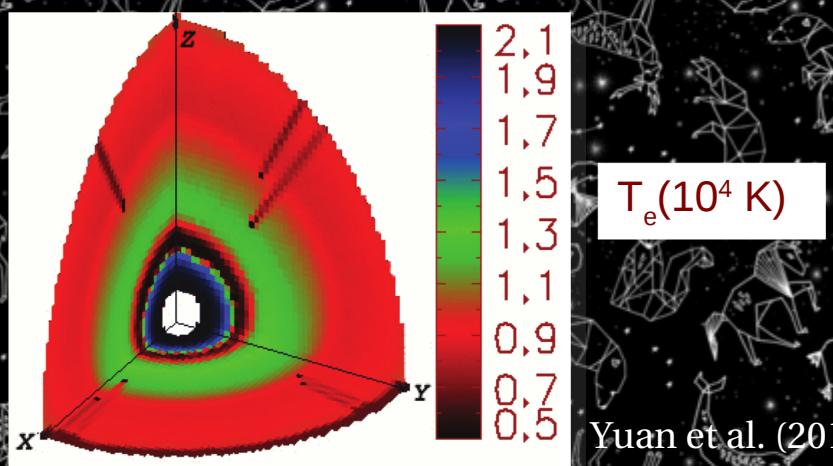$$(X^{+i}/H^+)_{ORLs} > (X^{+i}/H^+)_{CELs}$$
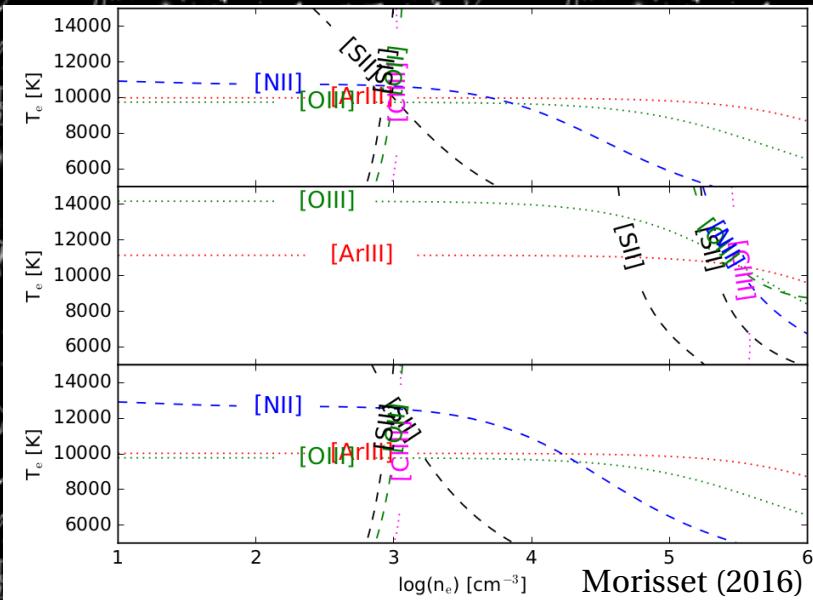
$$ADF = \frac{(X^{+i}/H^+)_{ORLs}}{(X^{+i}/H^+)_{CELs}}$$

O II 4649+50 RL   [O III] 5008 CEL

Garciá-Rojas et al. (2016)

Bi-density models

Bi-metallicity models

$T_e(10^4 \text{ K})$

Yuan et al. (2011)

Morisset (2016)