



# The ionization structure of forming dwarf galaxies

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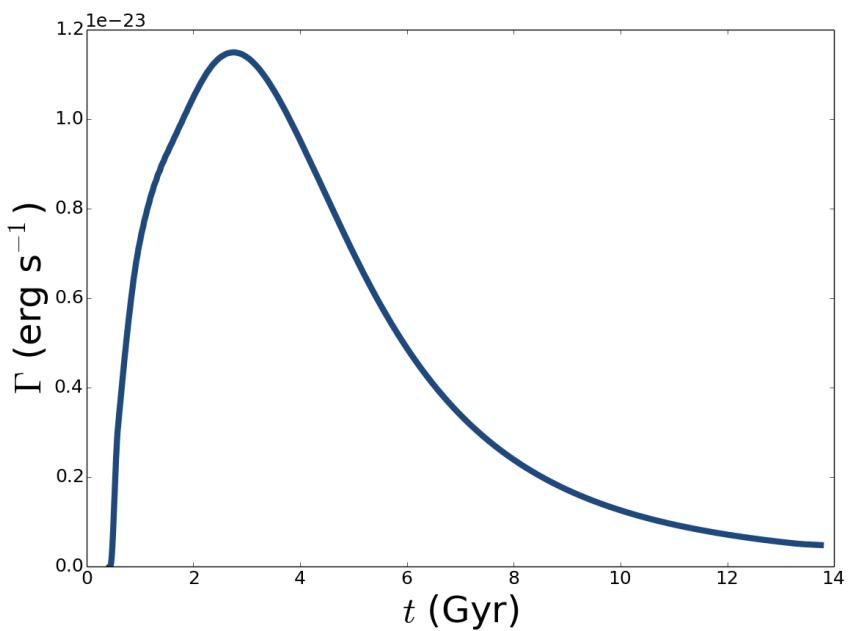
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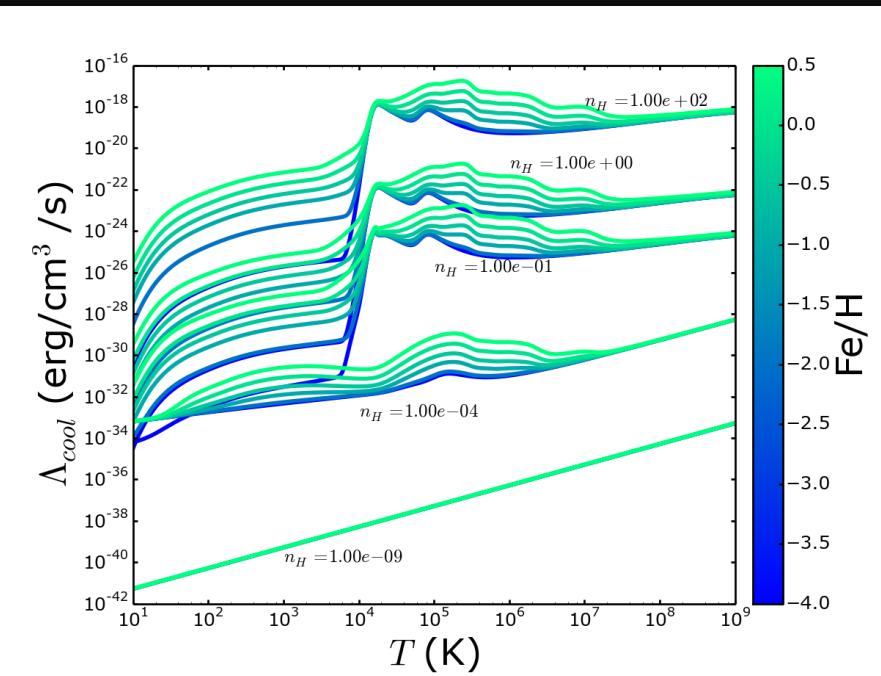


# Challenge: simulate isolated dwarf galaxies

Model ingredients:  
star formation, stellar feedback  
UV background  $\longrightarrow$  Radiative cooling



Faucher-Giguere et al. (2009)

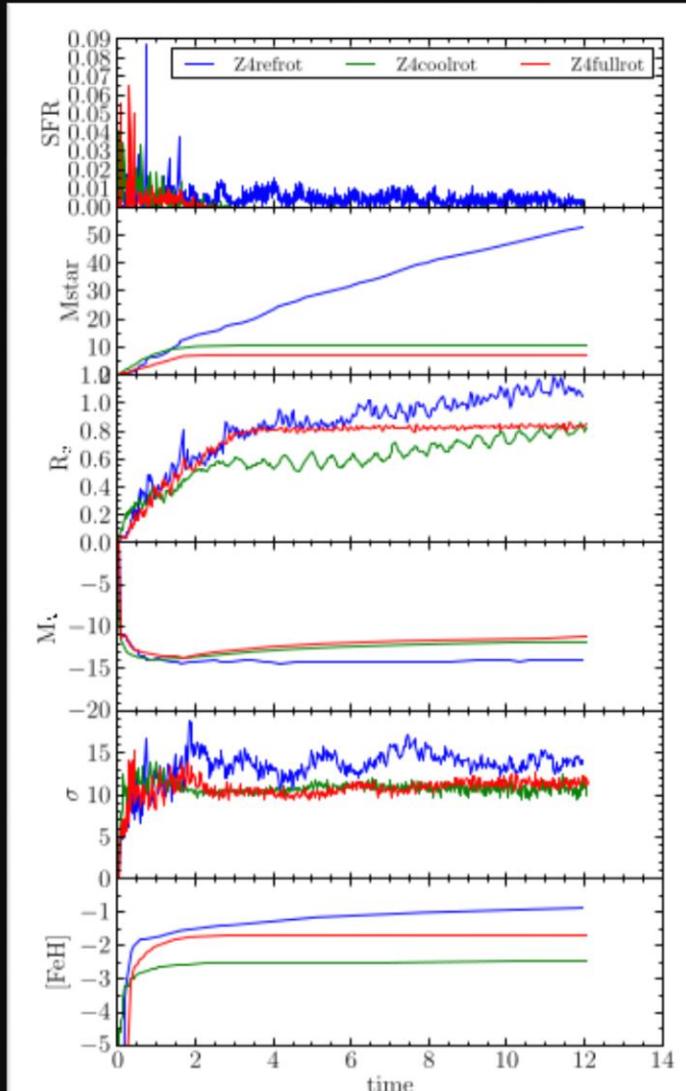
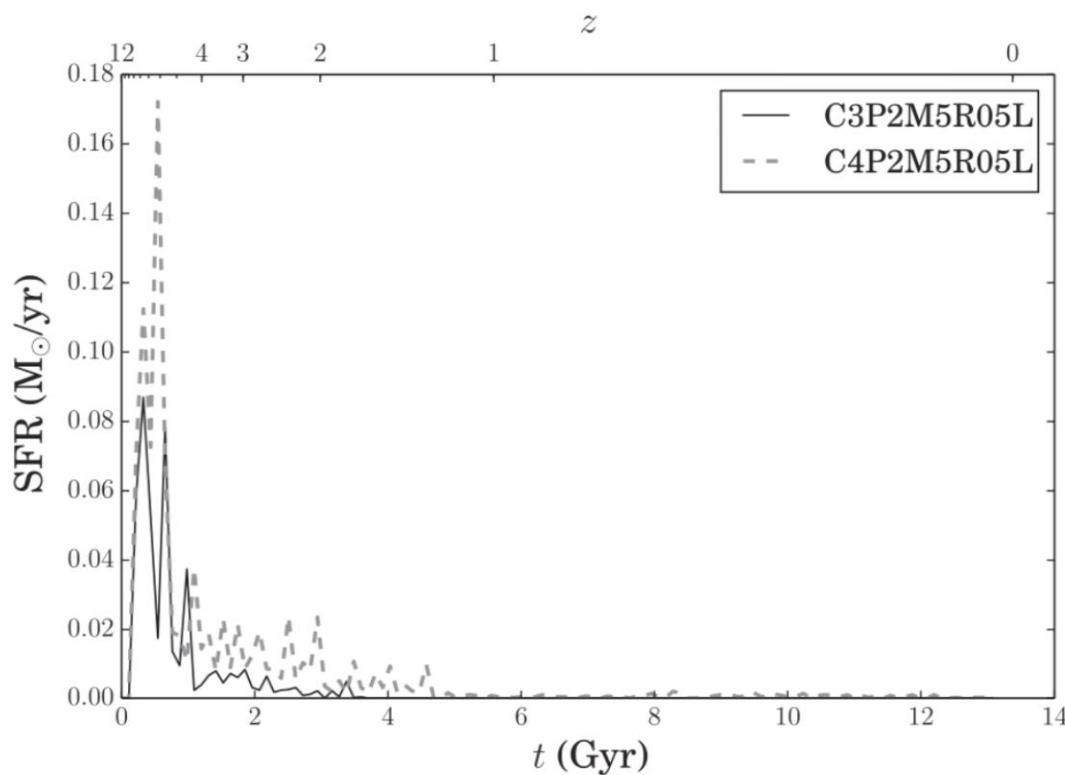


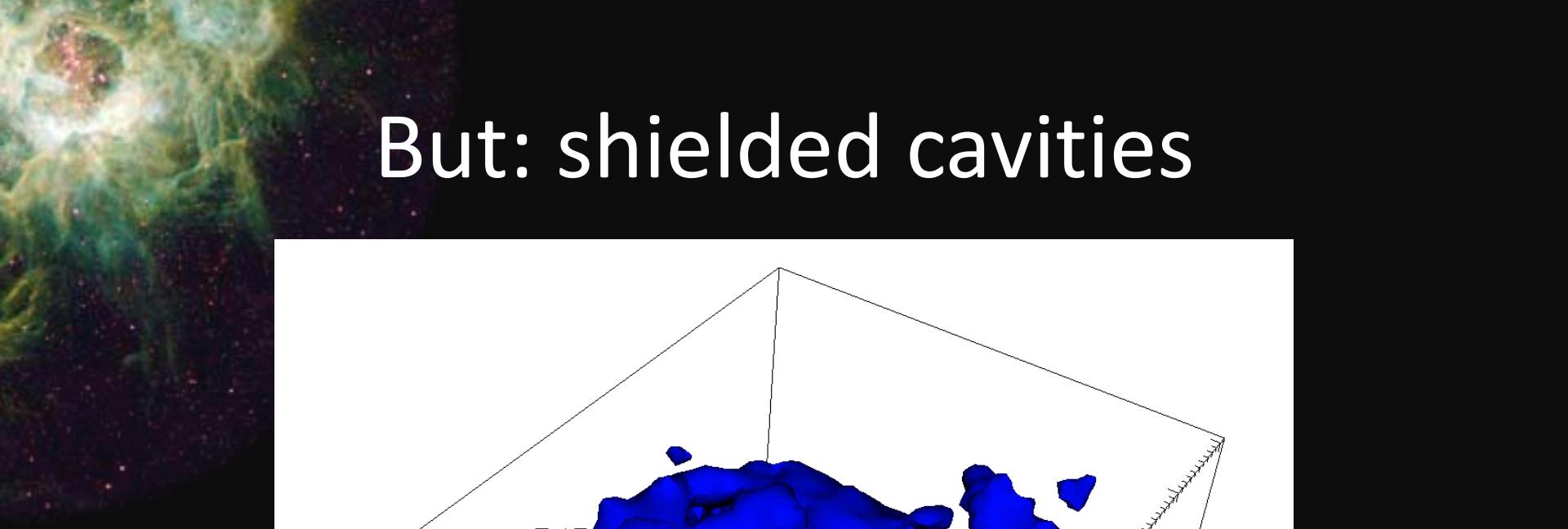
De Rijcke et al. (2013)

# UV background suppresses early star formation in dwarf galaxies

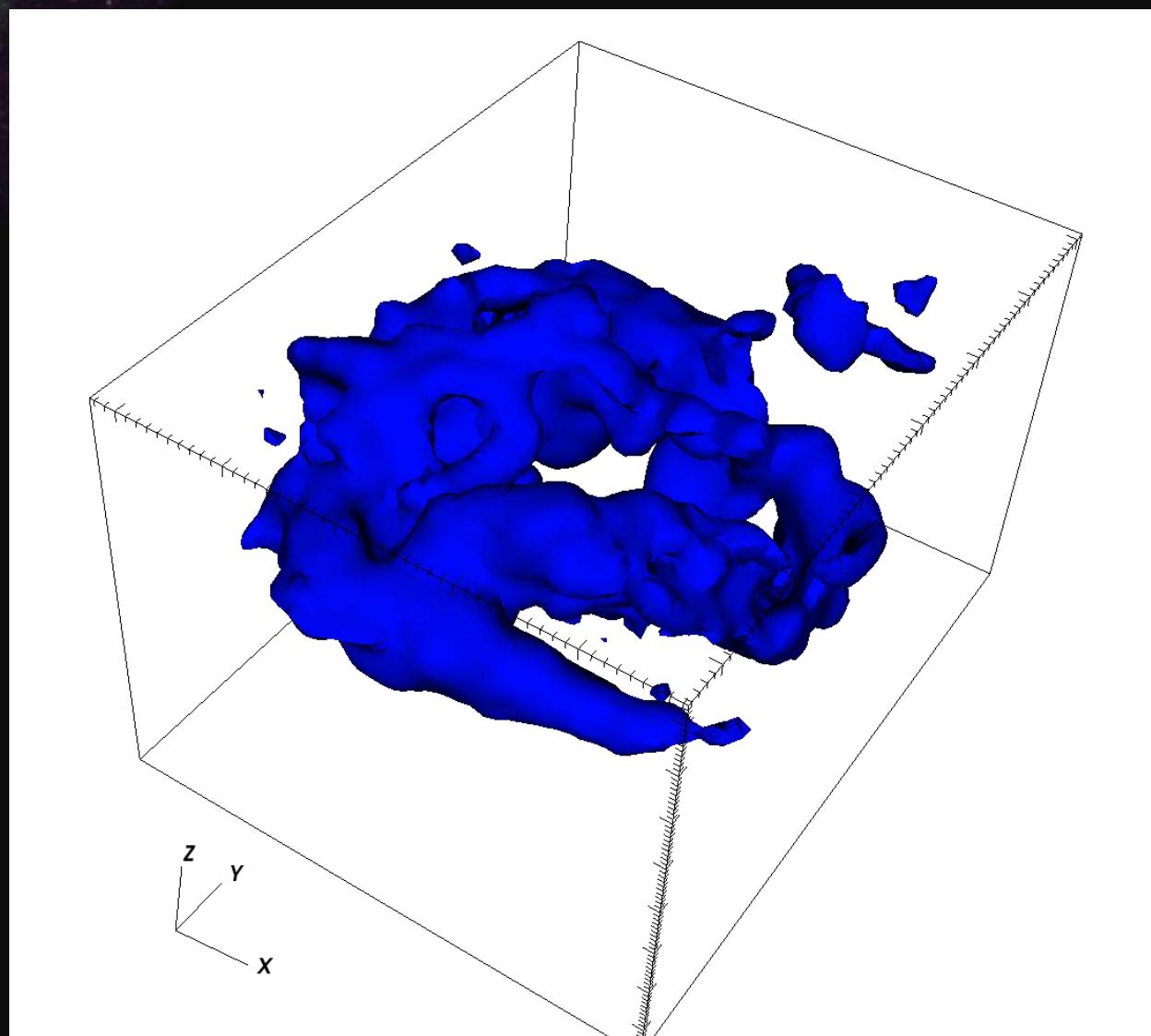
Schroyen, PhD thesis (2013)

Vandenbroucke et al. (2016)

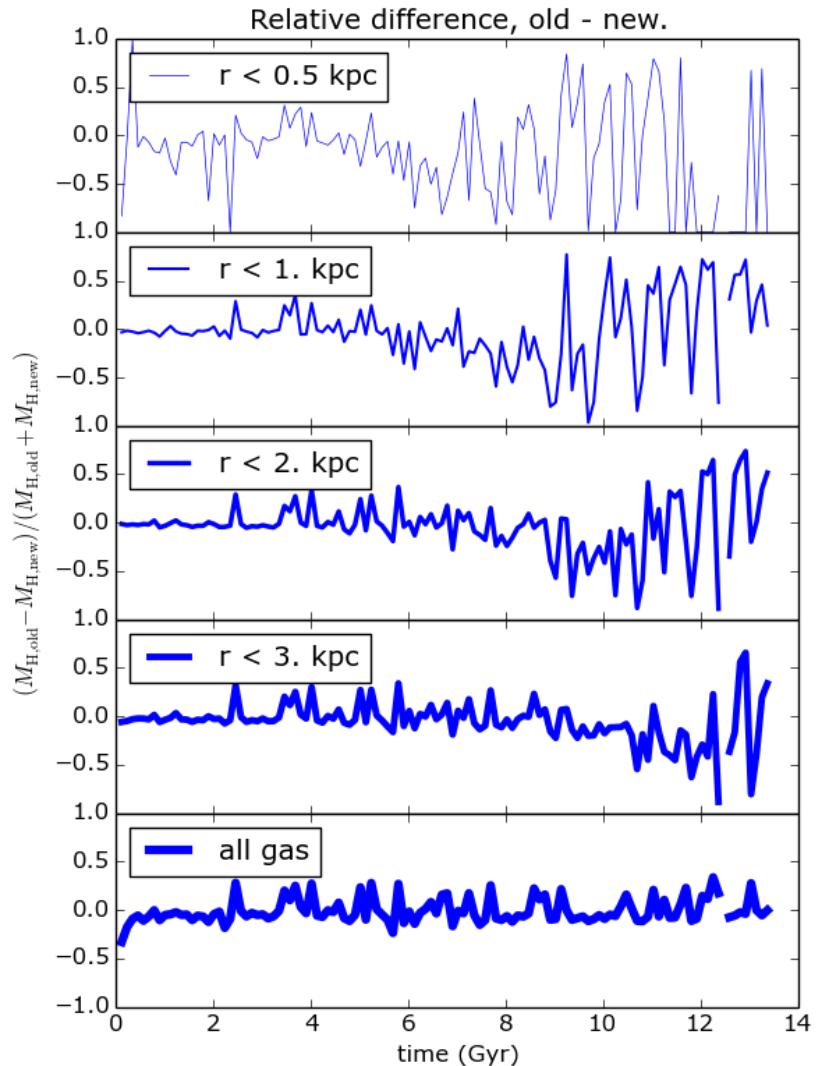
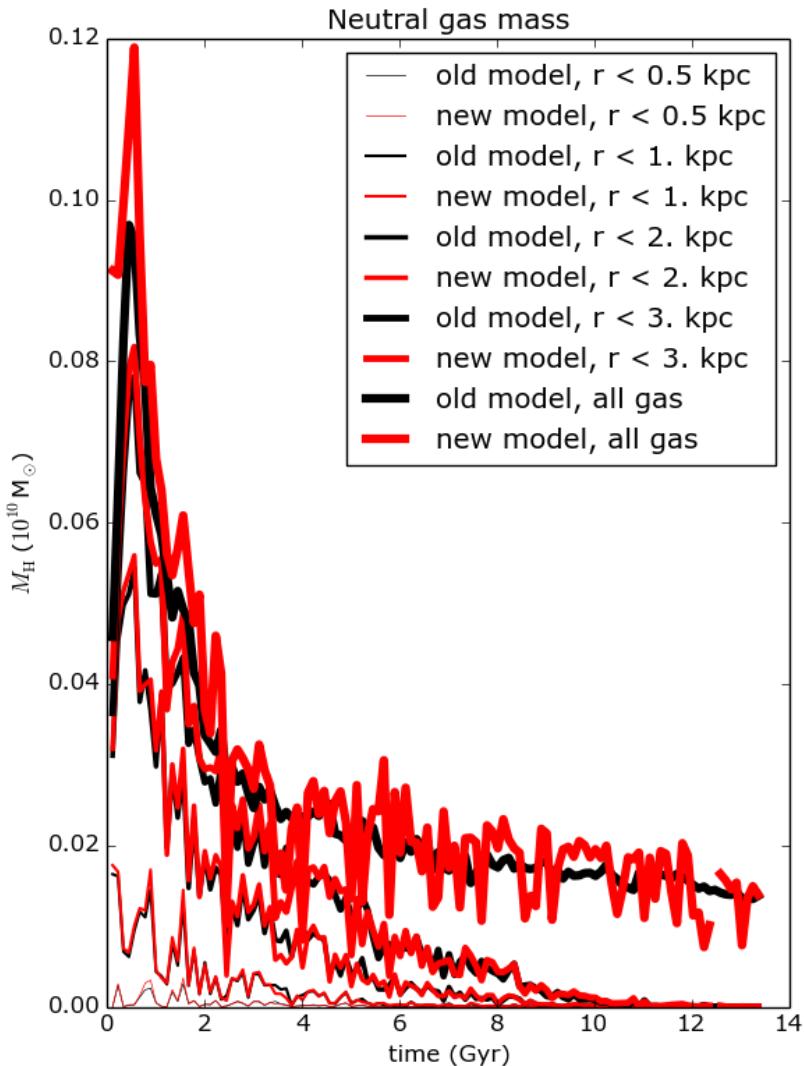




But: shielded cavities



# Proposed solution: proper radiative transfer



# Important differences

