

# Large Eddy Simulations of Gas-rich Isolated Disk Galaxies

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Nyx code

+ SGS turbulence model

+ local model of ISM

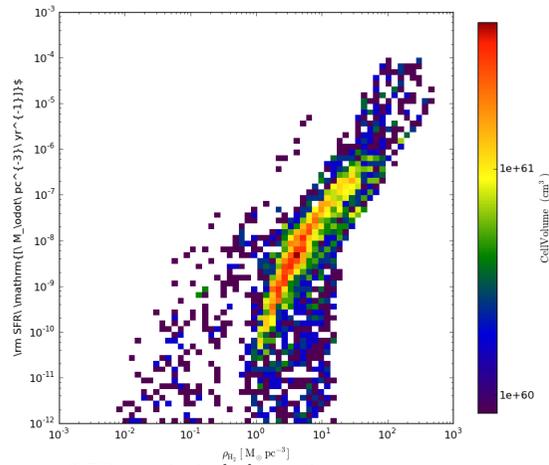
([2012MNRAS.421.1838B](https://doi.org/10.1093/mnras/stt1838)):

-multi phase

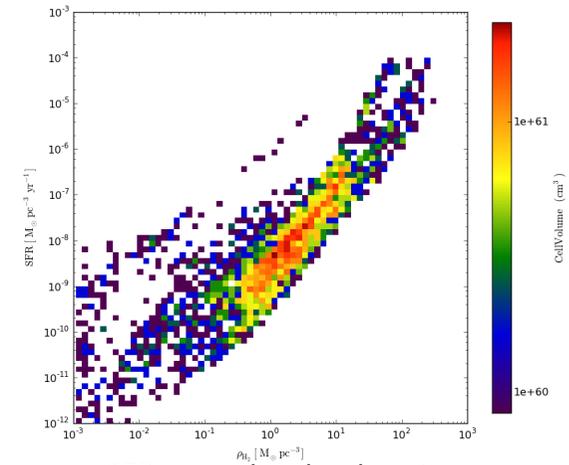
-star formation/ feedback

-**turbulence** regulation & production

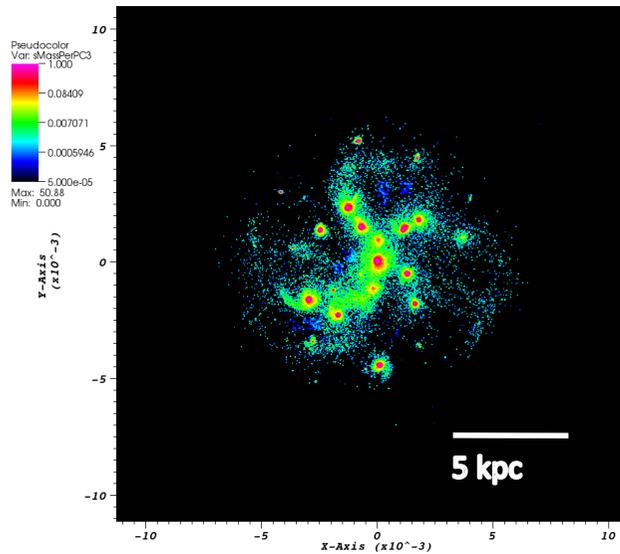
...after 300 Myr (preliminary)



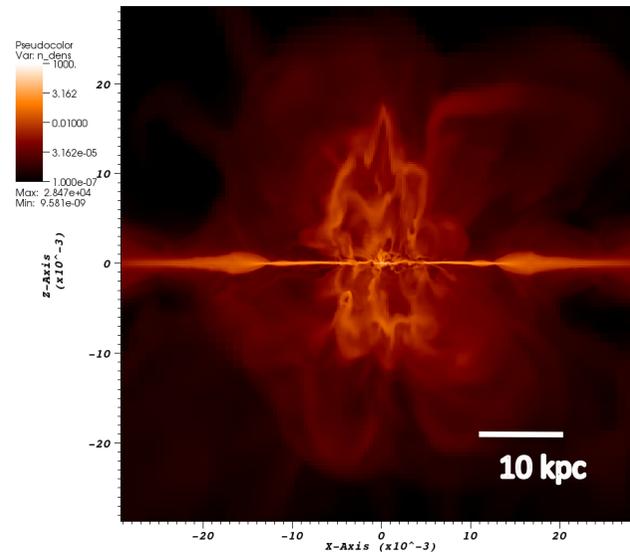
SFR vs. total density



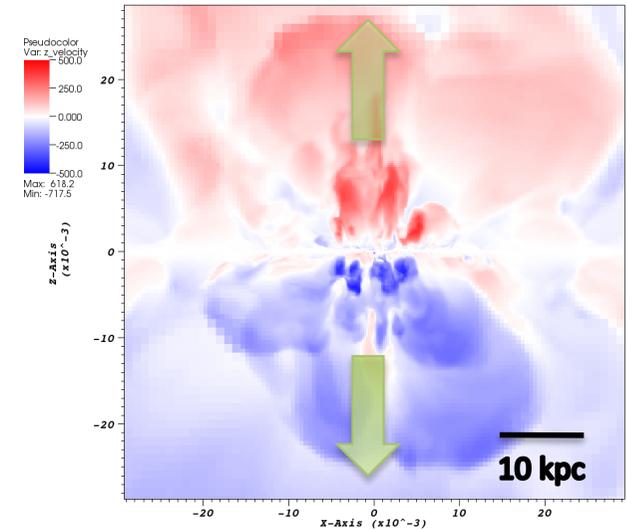
SFR vs. molecular density



stars in disk plane



density (polar slice)



feedback-driven winds