

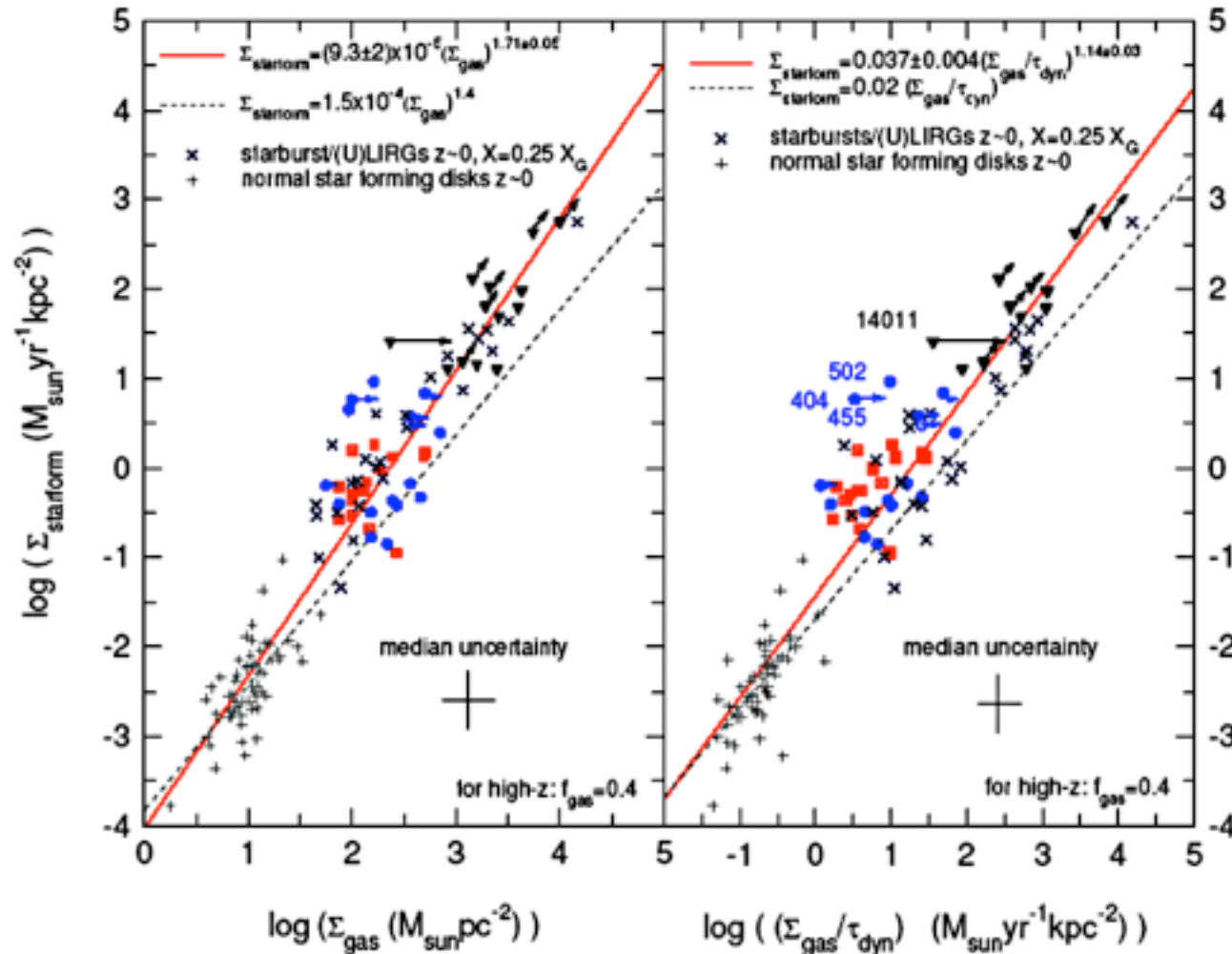
Discussion: Triggering & Prescriptions

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- “Triggering Mechanisms”: Do we need them?

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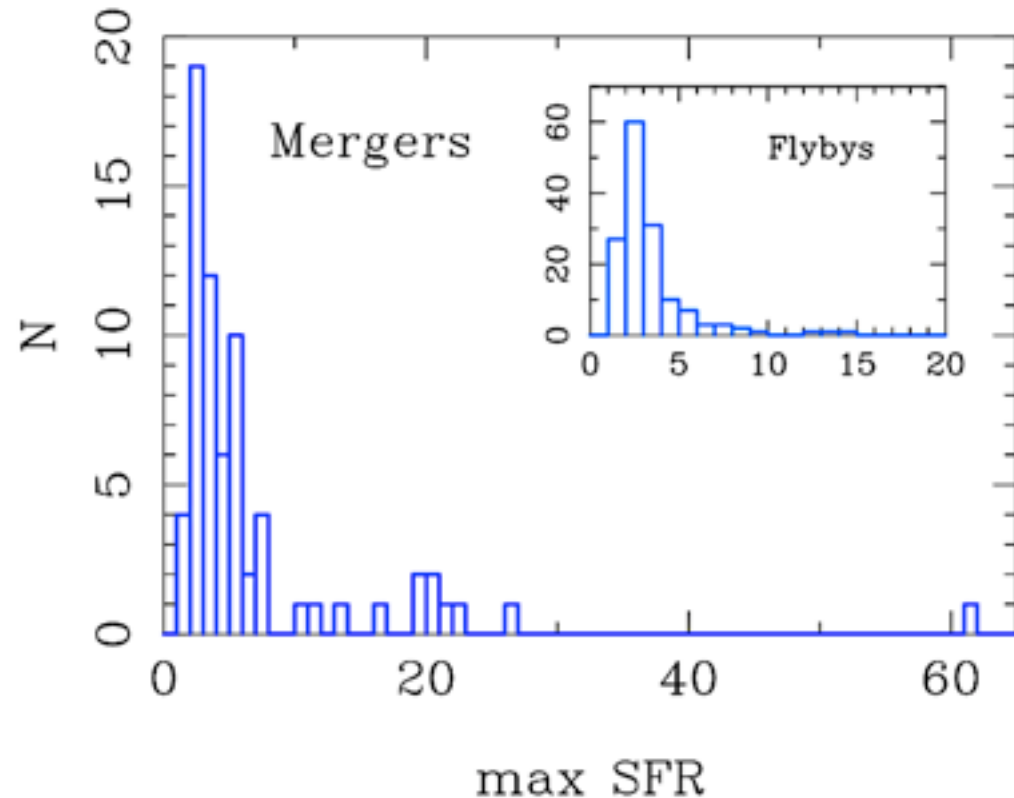
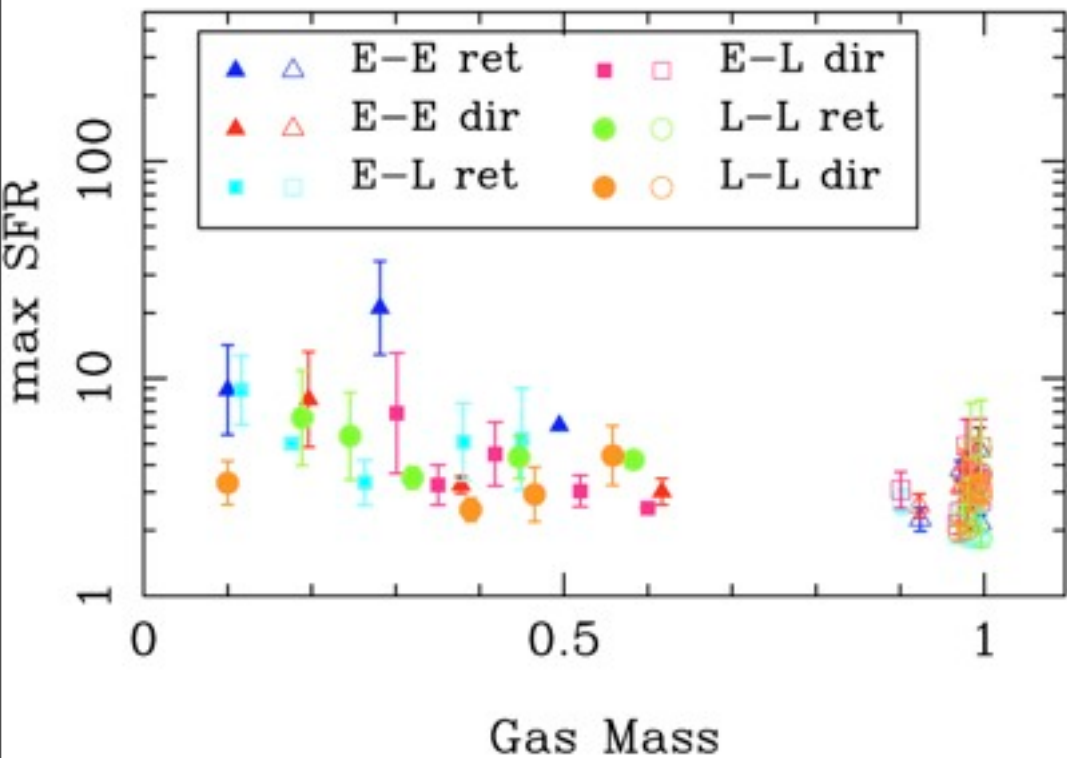
- Globally, ‘triggering’ = raising gas density

Discussion: Triggering & Prescriptions

- “Triggering Mechanisms”: Do we need them?
- Depends on definition of ‘burst’:
 - Is cooling a ‘trigger’? If star formation is quasi steady-state, is there a ‘trigger’?

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- Depends on definition of ‘burst’:



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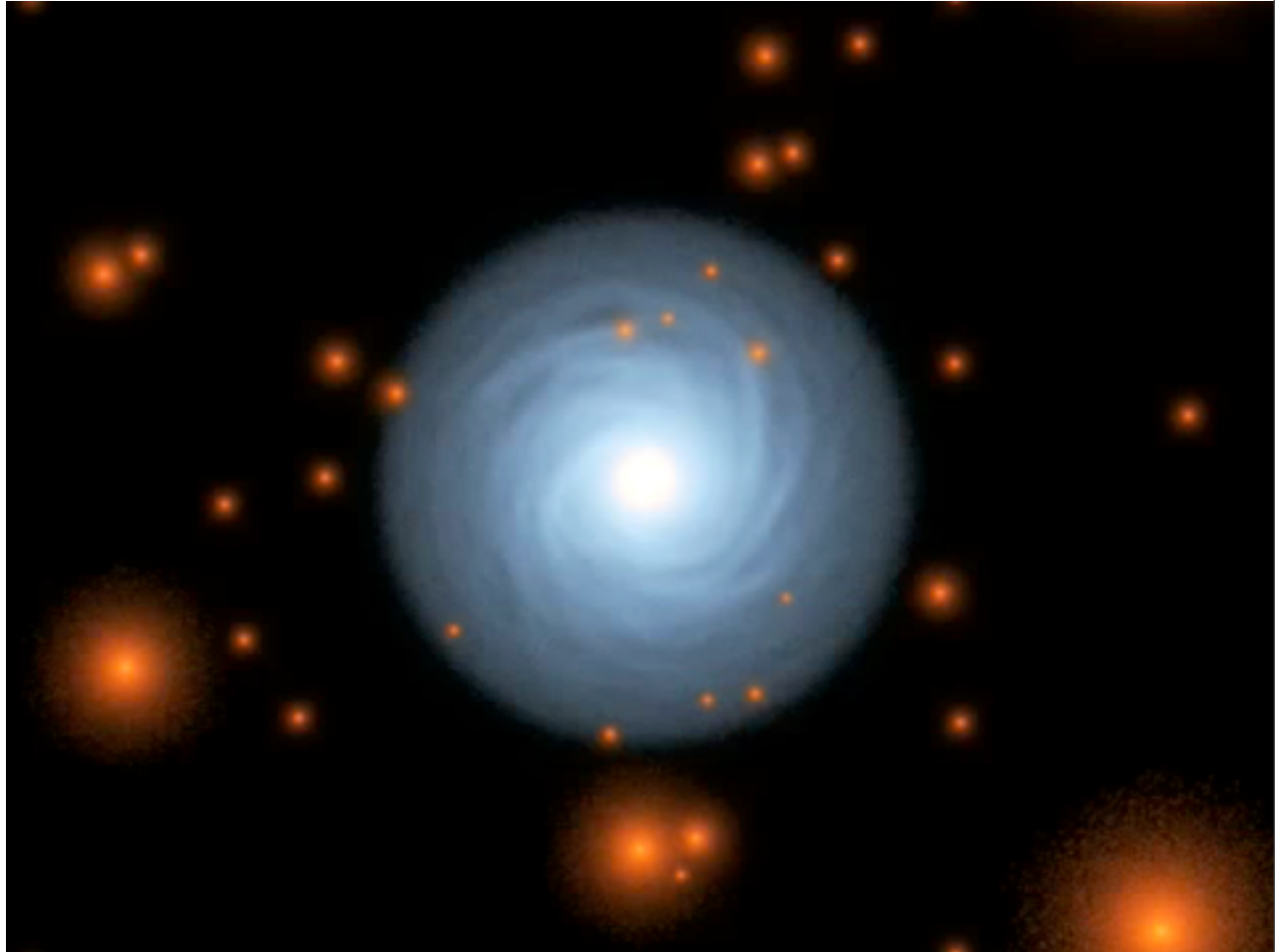
- Triggering AGN:
 - Does it need to know anything global?
(*Specifically* mergers/bars/etc?)
 - Does it need to know anything local?
(Just a function of central gas densities/
star formation)

Discussion: Triggering & Prescriptions

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 - How can we distinguish them?

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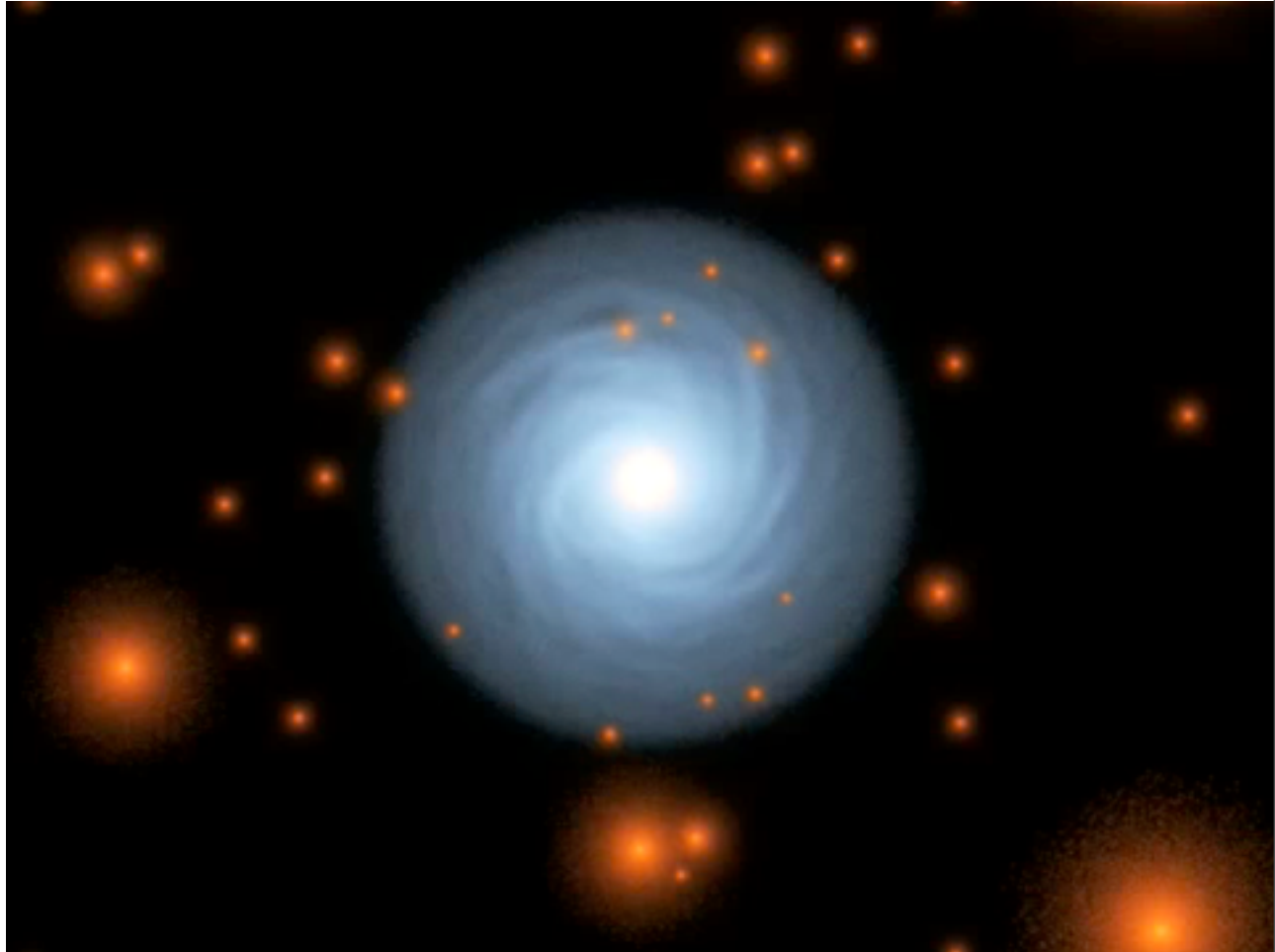


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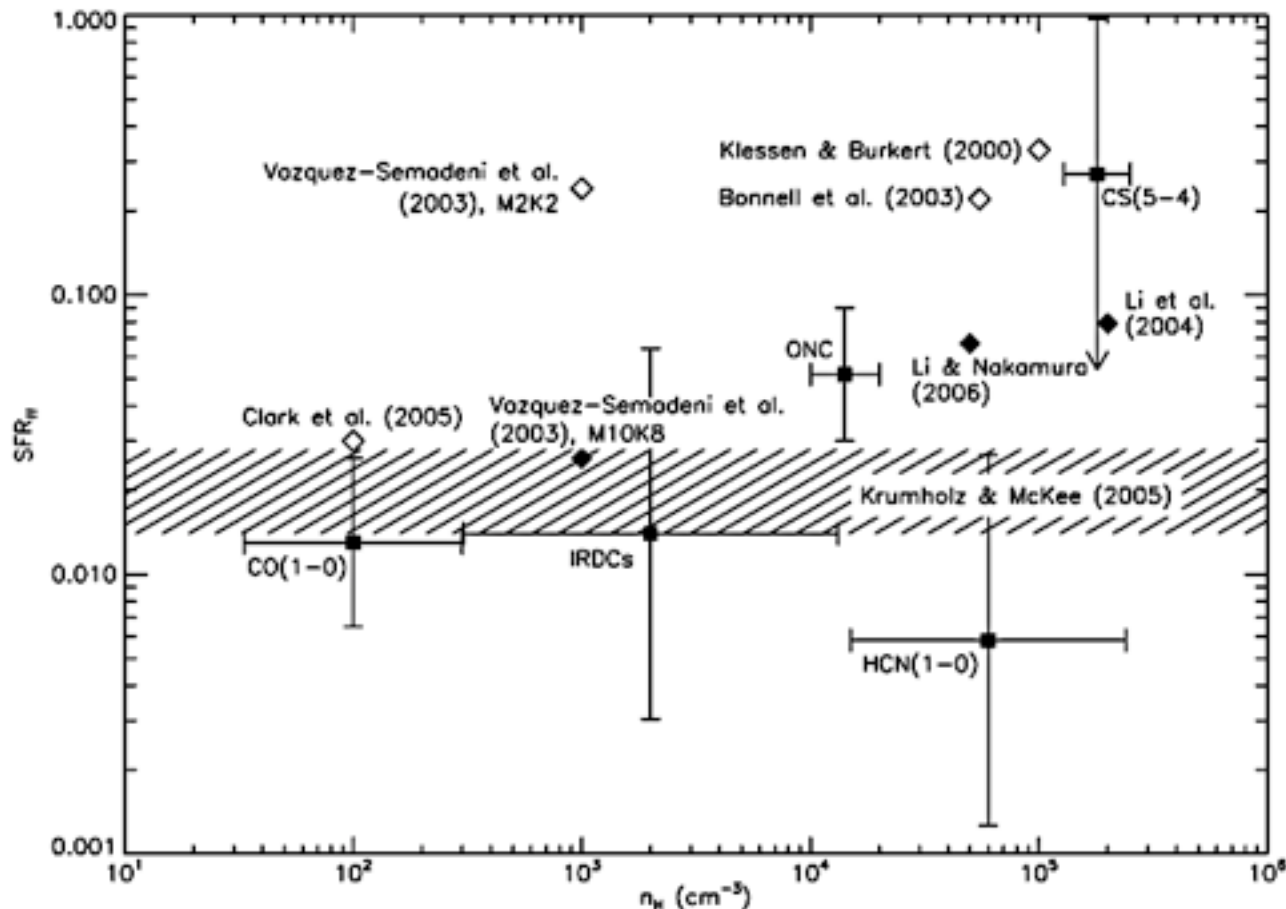


Discussion: Triggering & Prescriptions

- Mergers, bars, lopsidedness:
 - Different properties in 'relics'? ('classical' vs 'pseudo' bulges)
 - Can we correlate this with the starburst history of the Universe?

Discussion: Triggering & Prescriptions

- Star formation prescriptions:
 - KS-Law: $\dot{\rho}_* \propto \rho/t_{\text{dyn}}$ (roughly)
 - Do we need anything else?

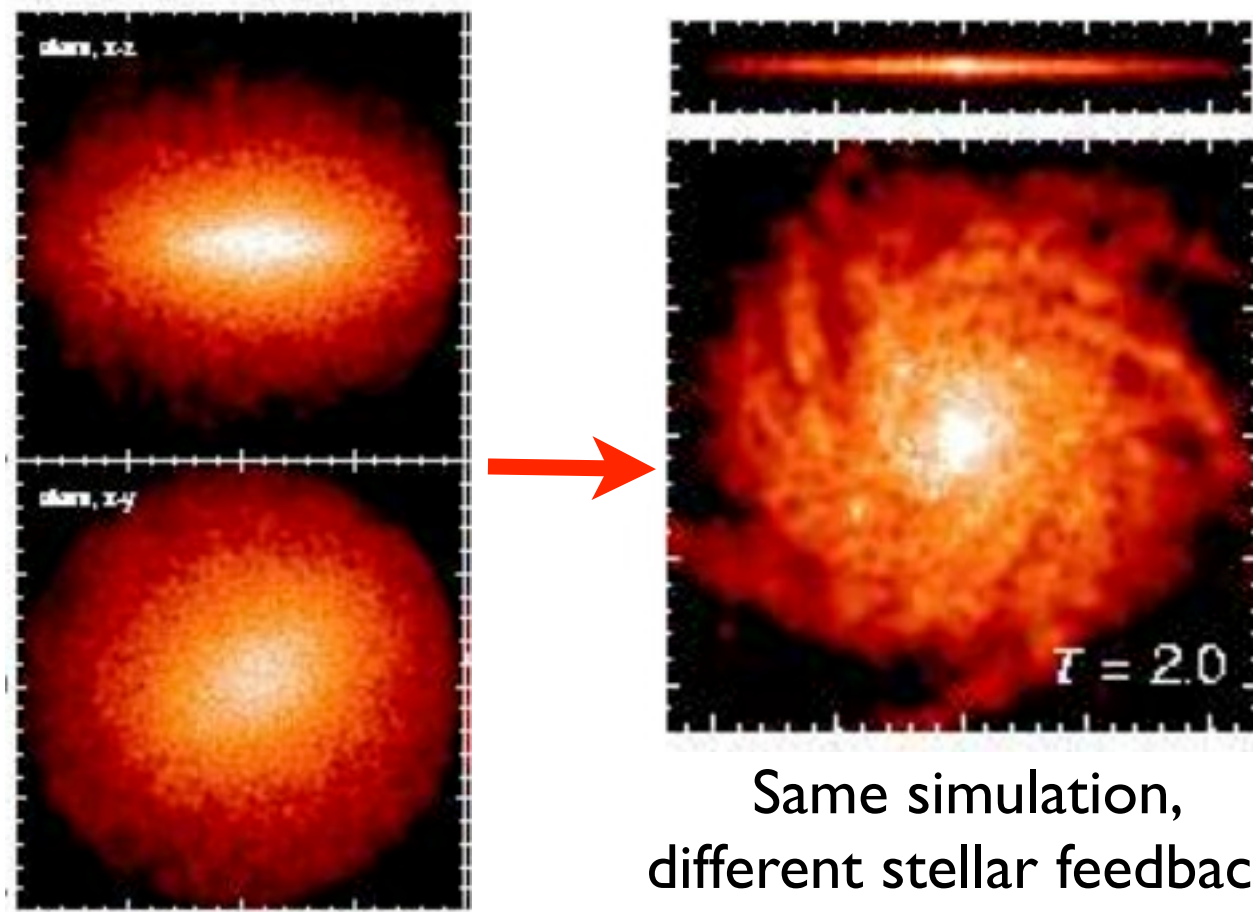


Discussion: Triggering & Prescriptions

- Star formation prescriptions:
 - Do we need anything else?
 - Molecule formation
 - Dependence on pressure, density, ionization field, etc.
 - Global vs. local interests

Discussion: Triggering & Prescriptions

- Star formation *feedback* prescriptions:
 - No outflow? 10x SFR in outflow?



Same simulation,
different stellar feedback

Discussion: Triggering & Prescriptions

- Star formation *feedback* prescriptions:
 - Does this matter for ‘triggering’ discussions?