Discussion: Star Formation Laws

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Some Questions

- Should we stop calling them "laws"?
- What is (are) the exgal SF RELATION(S)?
 - Relation between 1.4 (KS) and ~1.0 (Bigiel...)
 - Or sublinear (Blanc, Shetty)
- Why do local MW clouds not follow exgal relations?
 - Why Schmidt laws within, but not among local MCs?
- What is meant by "threshold"?
- Can dense gas relations unify MW and exgal?
- How do we define "dense"?
- What's (not) going on in the (MW) CMZs?

More Questions

- What are the implications for modelers?
 - If rate limiting step is IGM to ISM, who cares about a minor extra delay? (Faucher-Giguere et al.)
 - Or do we really want to understand SF as well as galaxy evolution?
 - If feedback controls it all, why do high and low mass SF regions have similar efficiencies?
 - Are volumetric "laws" better than areal "laws"?
 - Effects of averaging within/among MCs? (Eve)
- Choice of SFR tracer (averaging time)