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## Baryons reducing clustering: a movement of mass

*Friday, 12 April 2024 09:00 (25 minutes)*

Galaxy formation reduces the clustering of matter on scales  $k > \sim 0.1$  h/Mpc, primarily through AGN and supernova feedback. Several sophisticated models exist to model this effect as a function of cosmology, feedback strength and/or a number of free parameters. In this talk, I will demonstrate that we can understand the suppression of matter clustering to a very high degree as simply mass being removed from clustered regions, without considering halo profiles, and without free parameters. This also explains the strong correlation between power suppression and observed baryon fractions in large groups. The result is a model that directly links observables to the mass removed from different regions and a suppressed power spectrum signal to  $\sim 1\%$  accuracy.

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