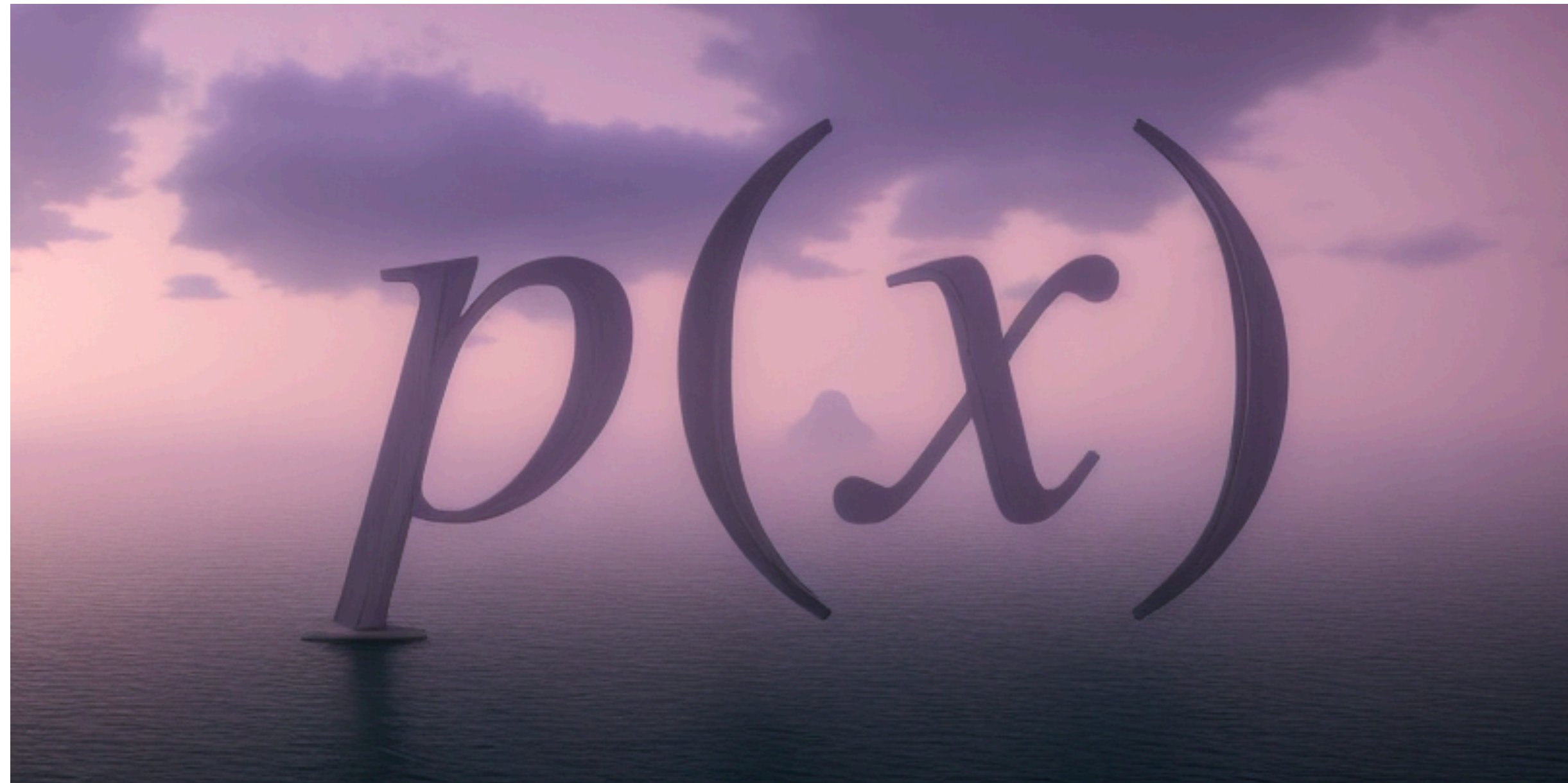


The *data distribution*



We often work with data distributions in physics
(modeled or empirical)

Simulators

$$x \sim p(x)$$

Simulators are ubiquitous: *they prescribe a way to sample from the data distribution*

Collider data

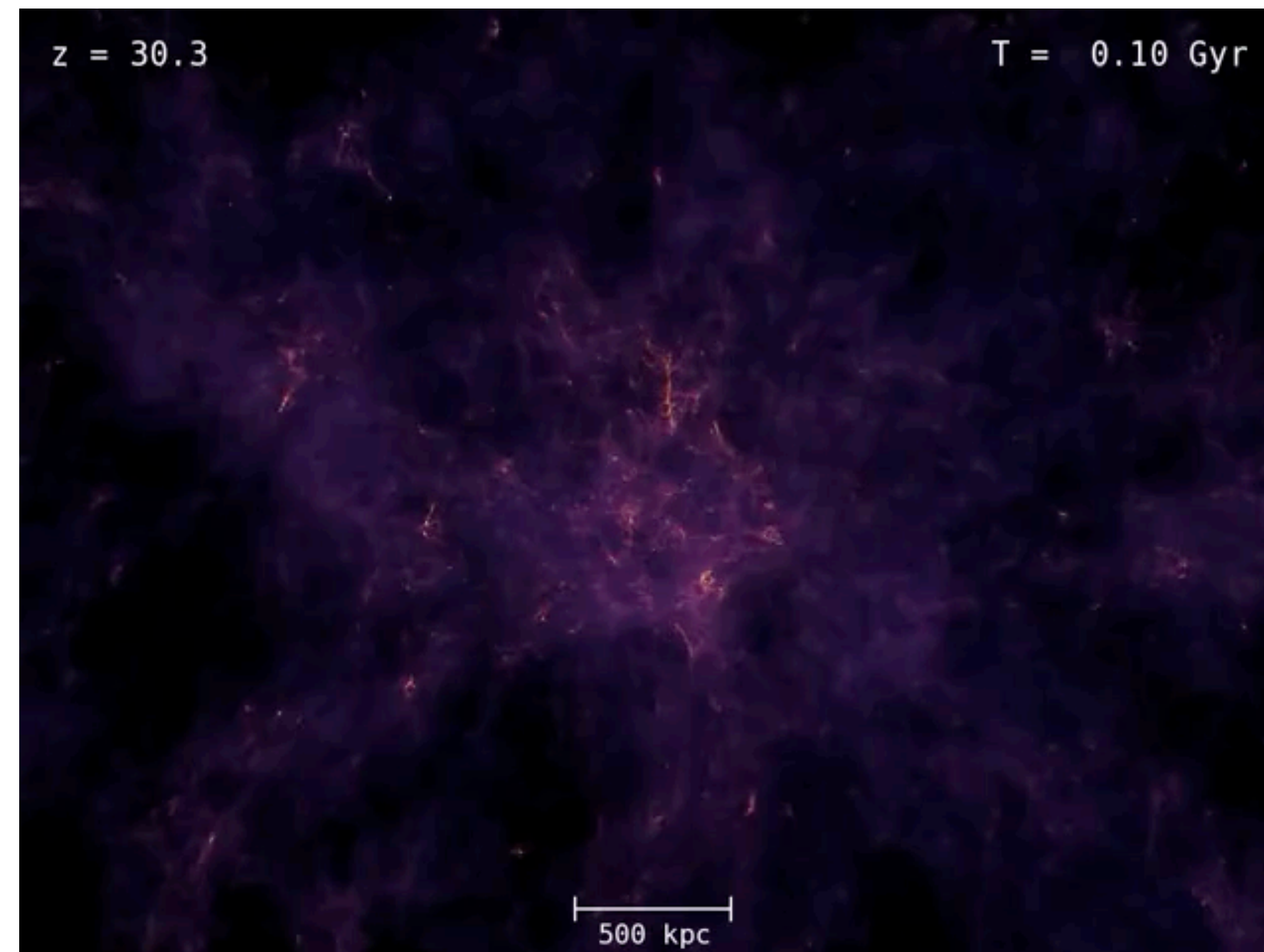
particles $\sim p(\text{particles})$



[C. Cesarotti with ATLAS]

Cosmology data

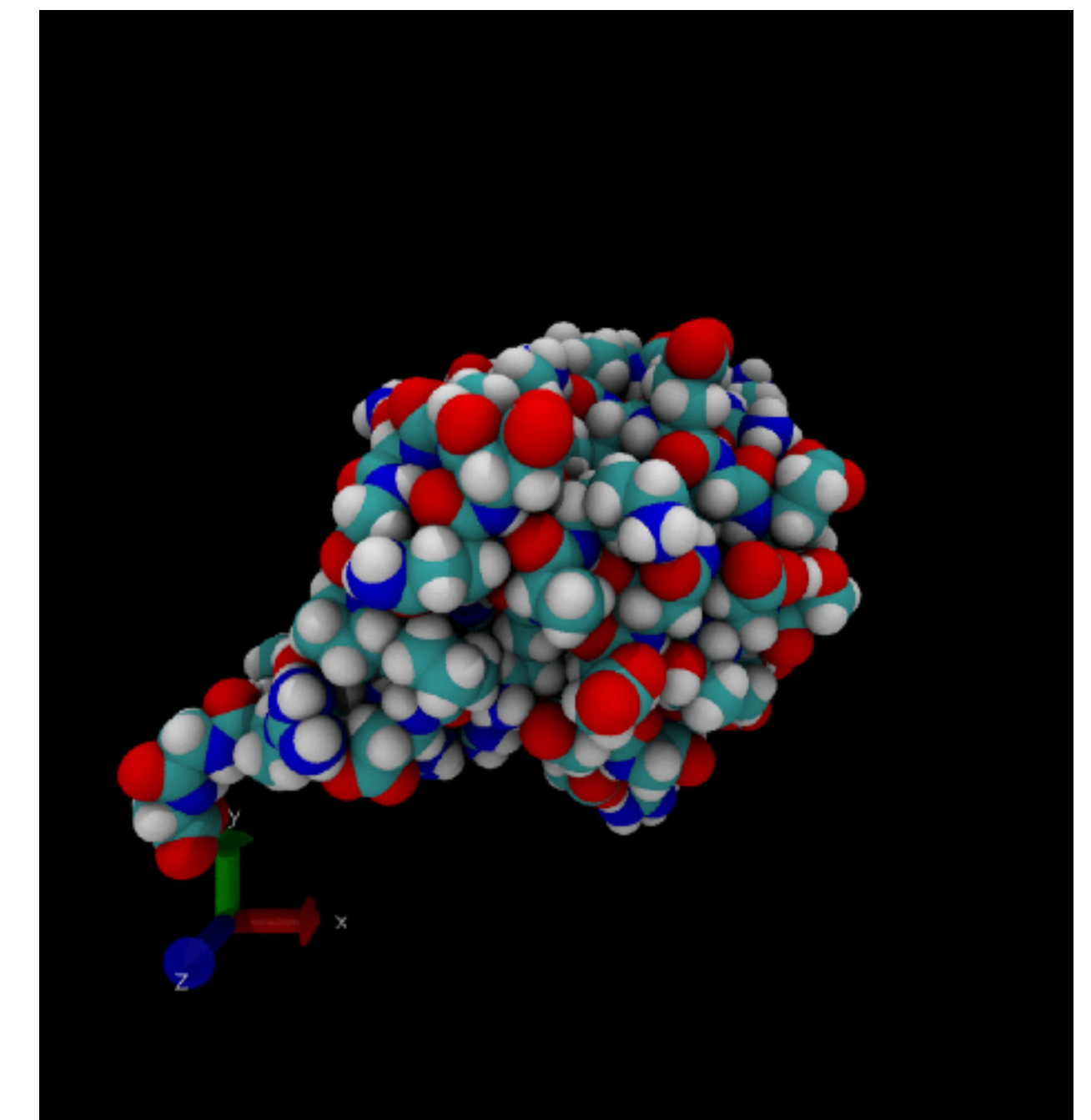
particles $\sim p(\text{particles})$



[Aquarius simulation]

Molecular dynamics

configurations $\sim p(\text{configurations})$



[E. Cancès et al]