

Siddhant Mishra-Sharma (MIT/AI FI) Summer School

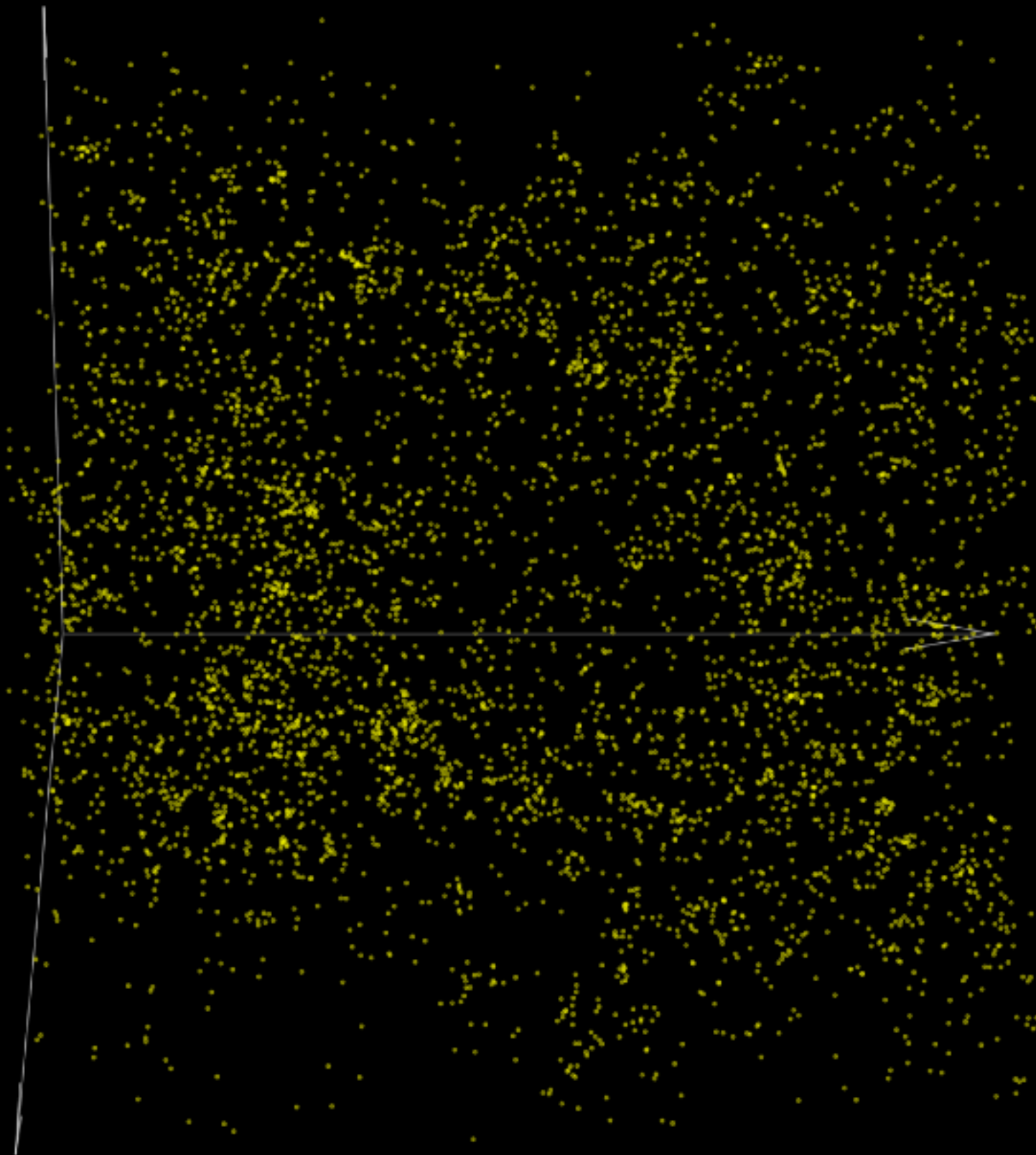
162

5

2

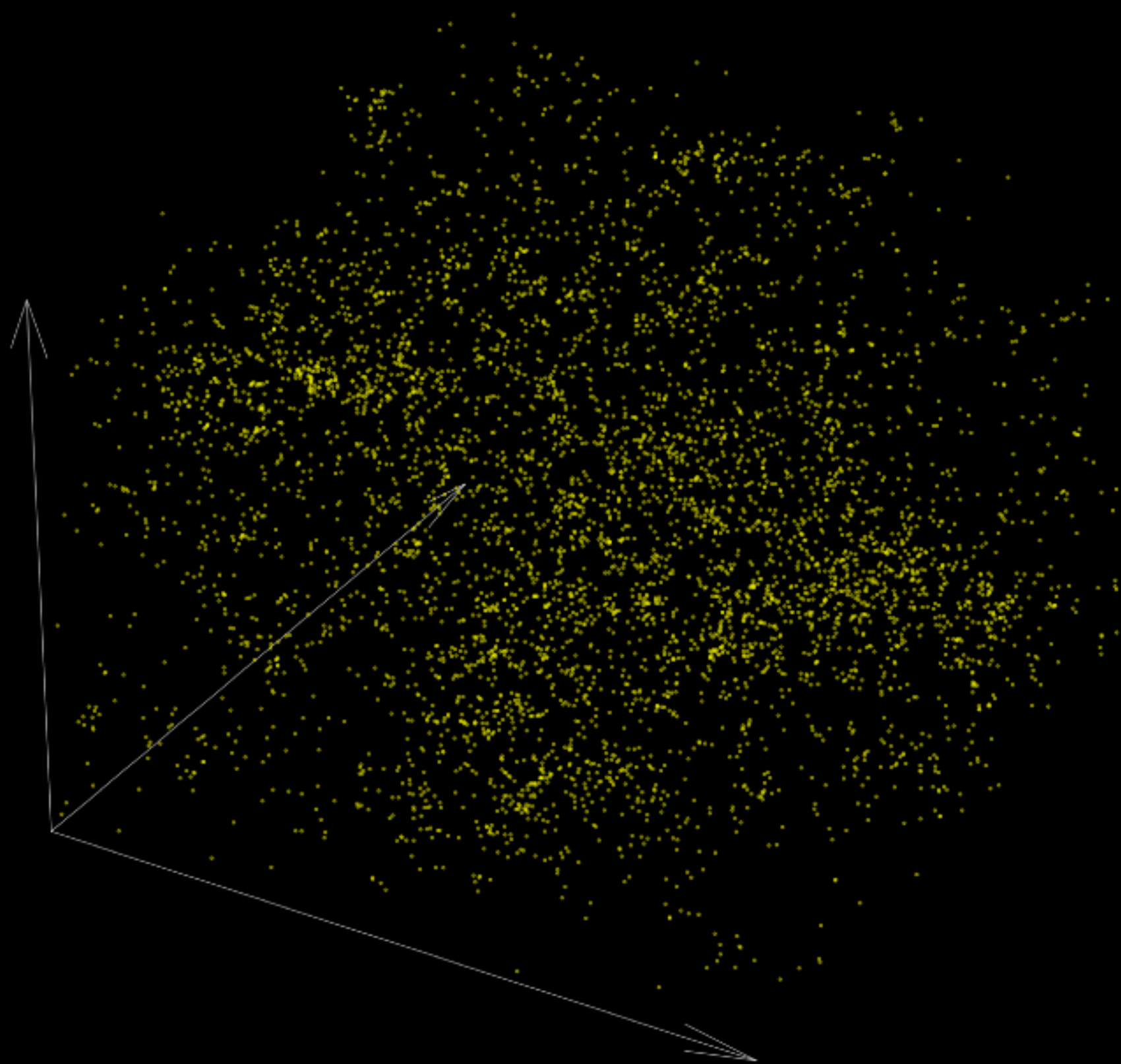
Diffusion on galaxies

$$\Omega_m = 0.10, \sigma_8 = 0.60$$



Conditional generation $x \sim p(x \mid \Omega_n, \sigma_g)$

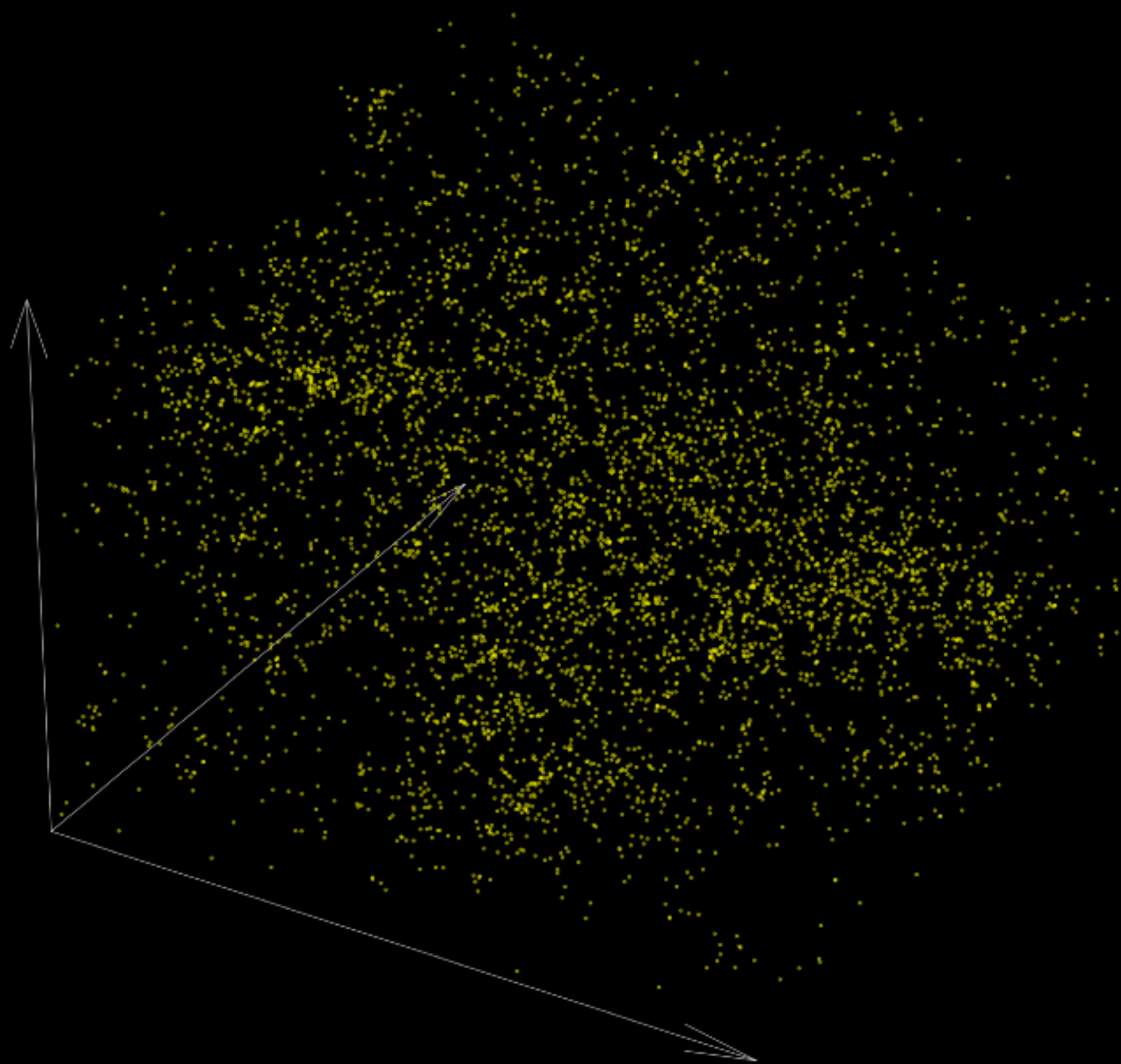
$t = 0.00$



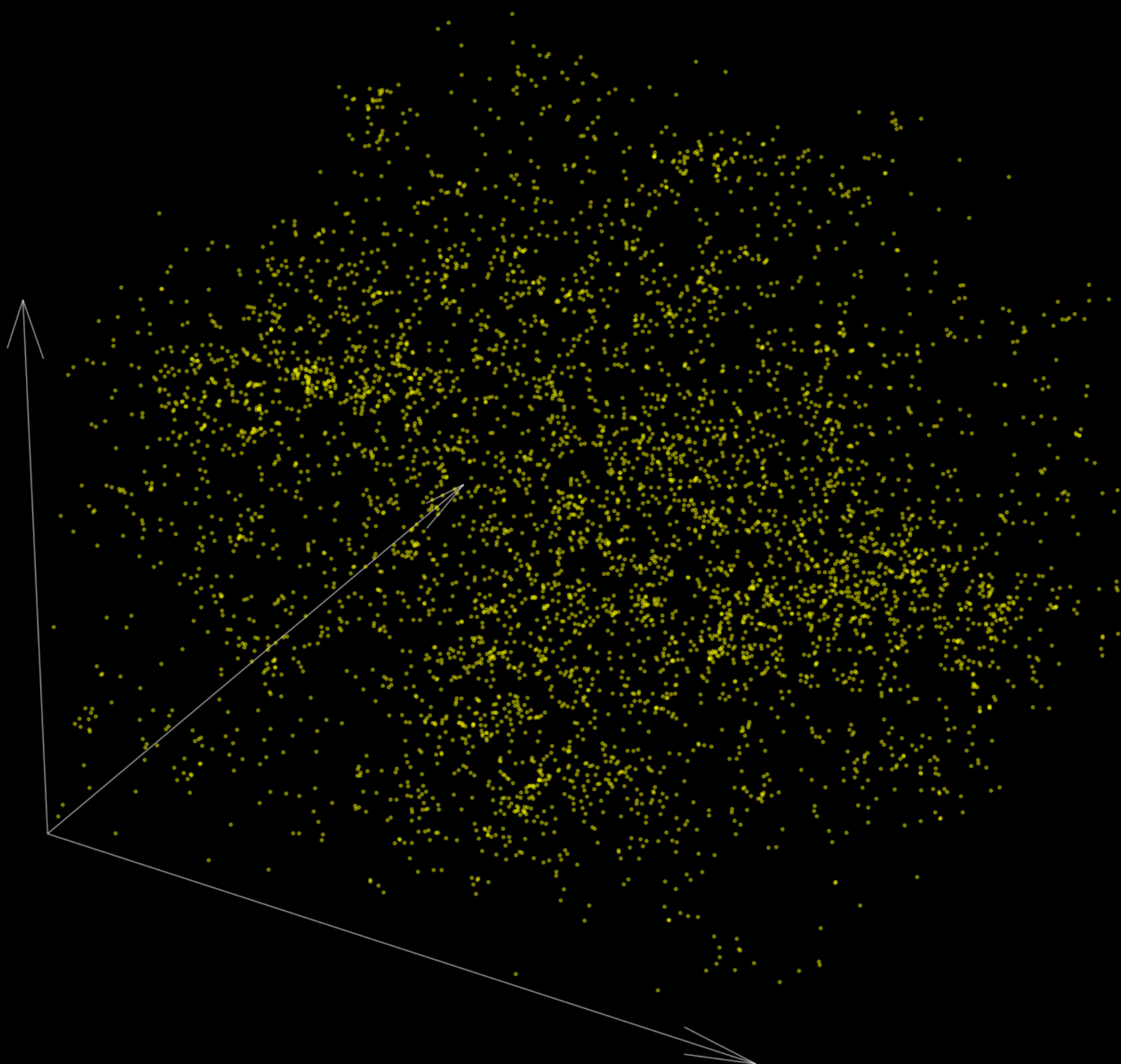
Diffusion processes

SM, Cuesta-Lazaro [in prep]

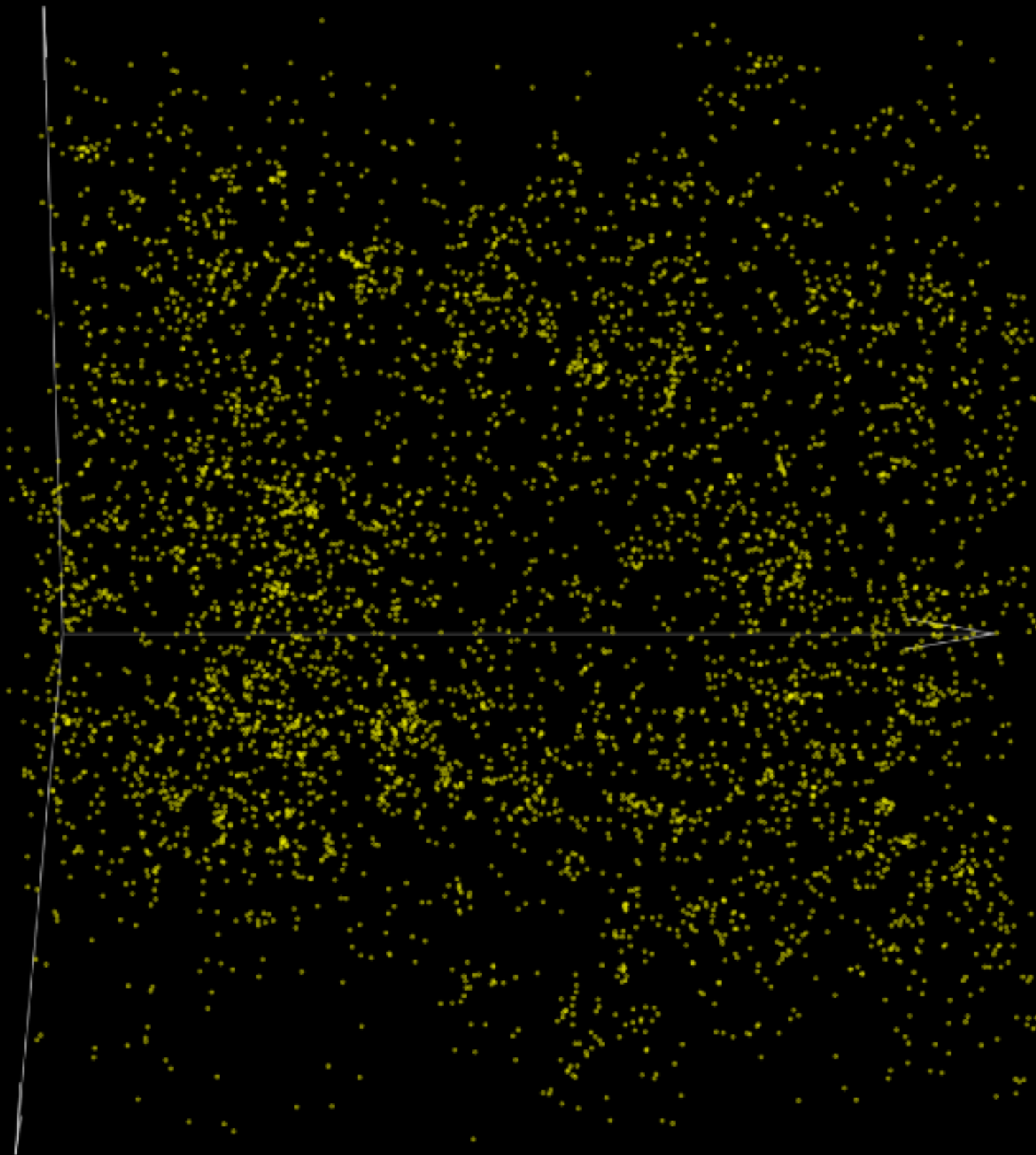
$t = 0.00$



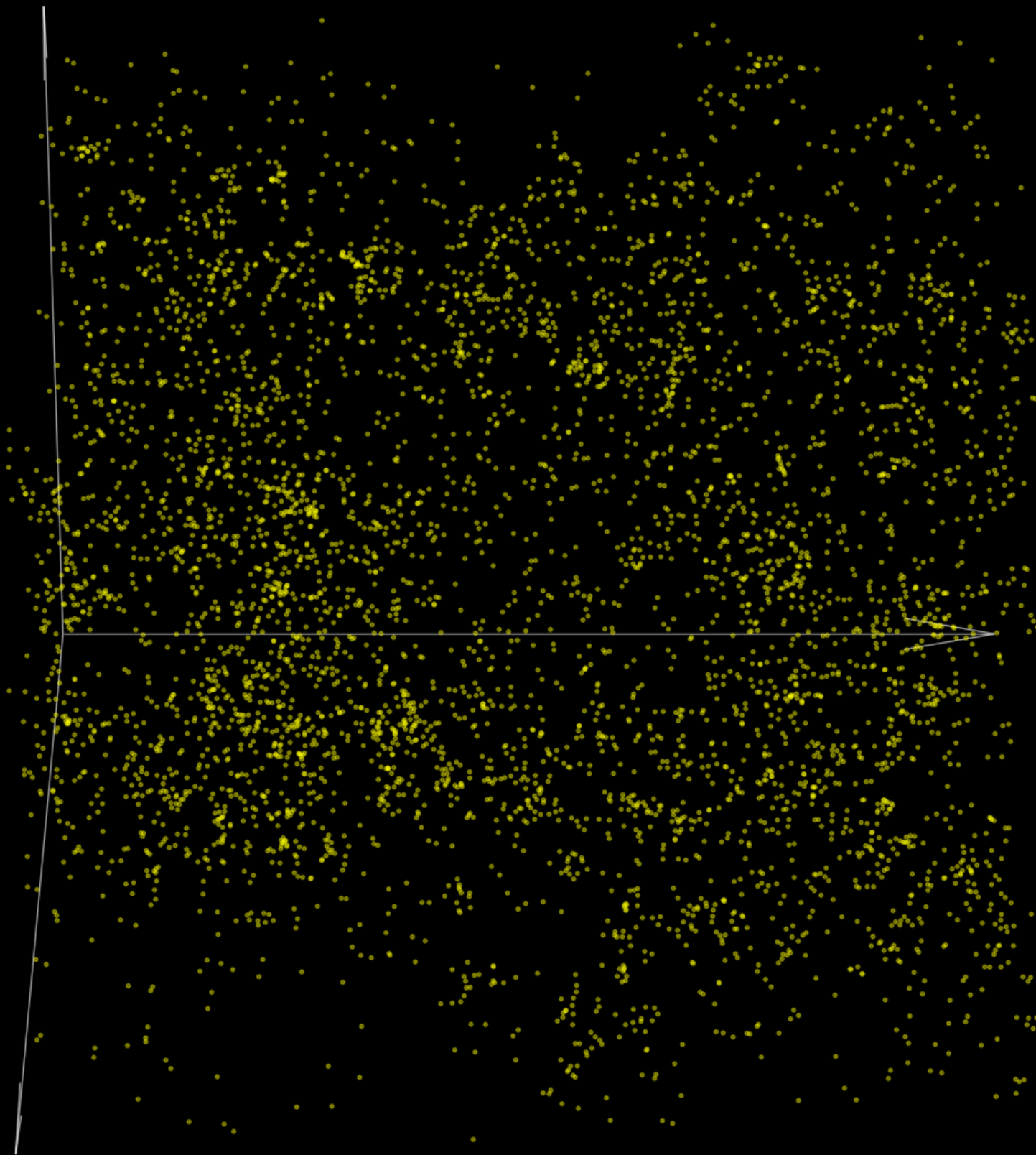
$t = 0.00$



$$\Omega_m = 0.10, \sigma_8 = 0.60$$



$$\Omega_m = 0.10, \sigma_8 = 0.60$$

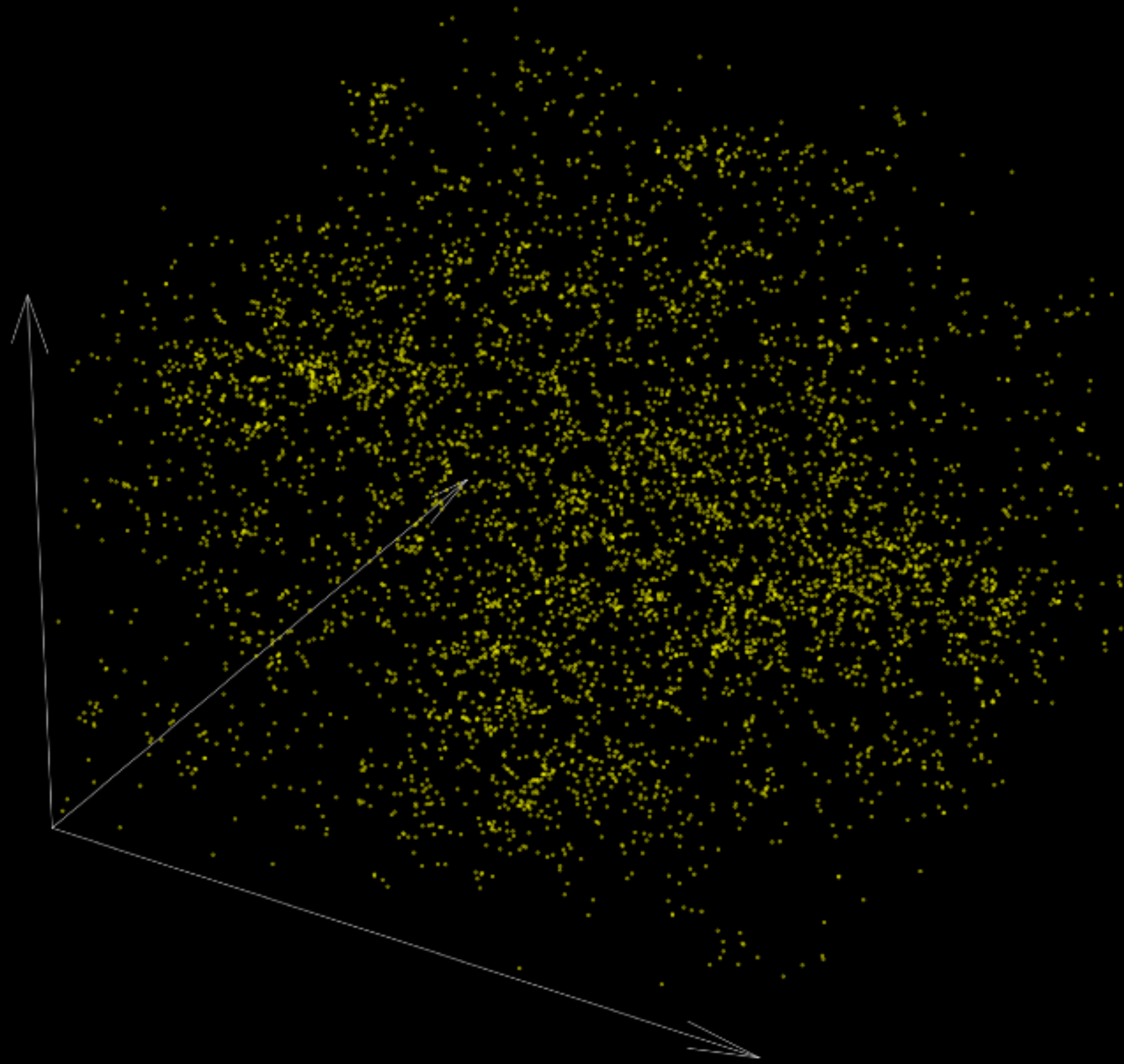


Diffusion on galaxies

SM, Cuesta-Lazaro [in prep]

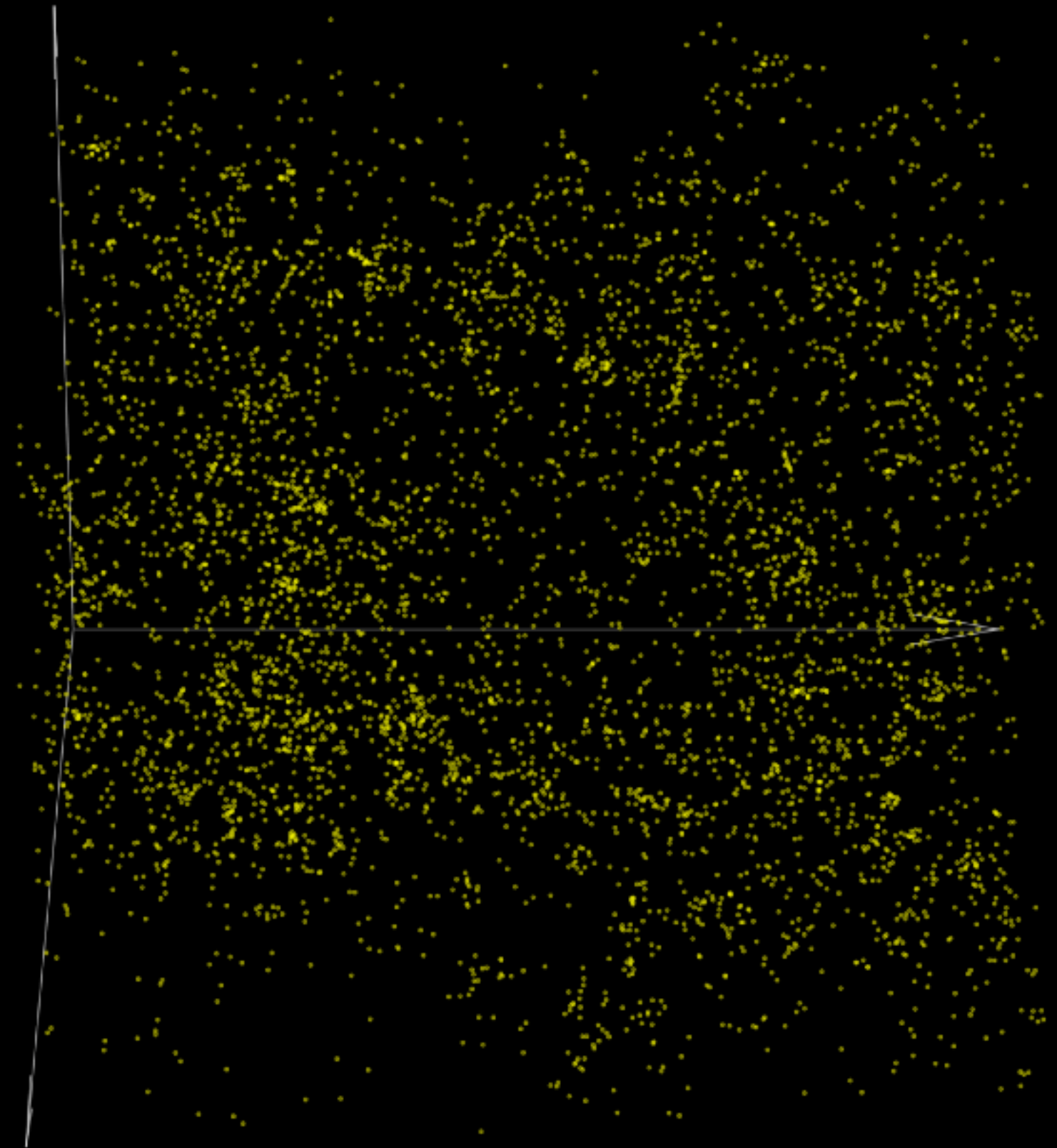
Diffusion process

$t = 0.00$



Conditional generation $x \sim p(x \mid \Omega_m, \sigma_8)$

$\Omega_m = 0.10, \sigma_8 = 0.60$



Likelihoods and parameter inference

For a given dataset, can use the likelihood $p(x \mid \theta)$ for posterior parameter inference

- Monte Carlo sampling (MCMC, nested sampling, HMC...)
- Variational inference