

Line Intensity Mapping in GLASS

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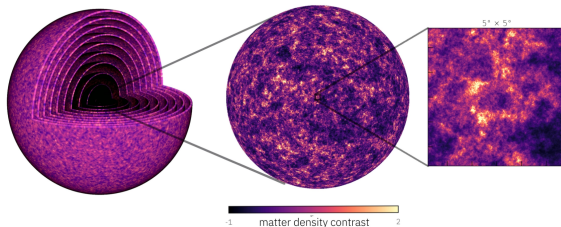
June 4, 2025



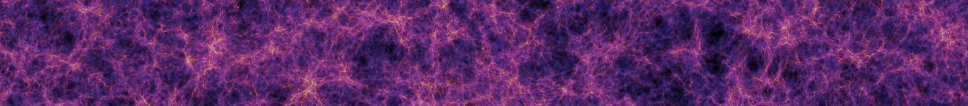
What is GLASS?

Key features:

- ▶ A new technique for generating transformations of Gaussian and lognormal fields with high precision.
- ▶ Iterative integration along the line of sight to obtain weak lensing fields.
- ▶ Flexible galaxy modeling.



Tessore et al., 2023

A visualization of the cosmic web, showing a dense network of purple and blue filaments and nodes against a dark background.

Mean HI Temperature

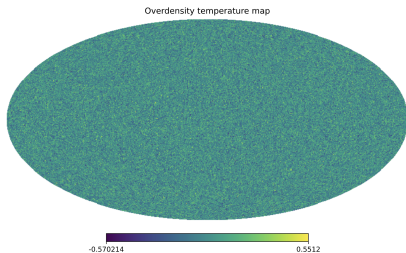
The mean HI temperature is defined as (Battye et al. 2013):

$$\bar{T}(z) = 180 \frac{(1+z)^2}{E(z)} \Omega_{HI}(z) h \quad (1)$$

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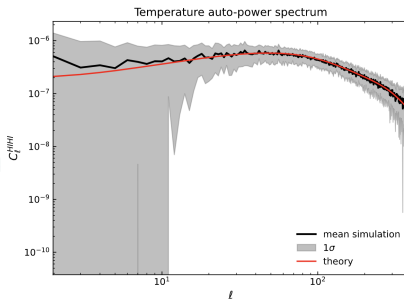
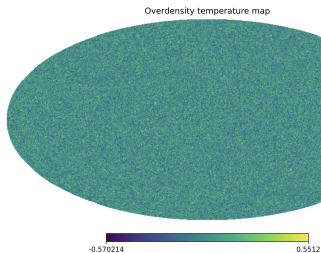
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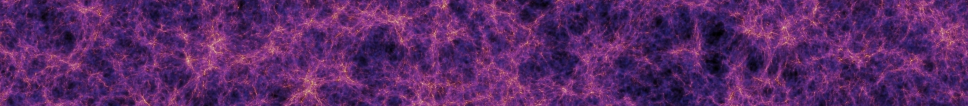


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Thanks for the attention!