



Ly-alpha Forest Tomography

Towards optimal extraction of dark matter signal from the Ly-alpha forest
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Abstract
The Ly-alpha forest is a rich source of information about the distribution of dark matter in the universe. It is a probe of the matter distribution on scales from 10 kpc to 100 Mpc. The Ly-alpha forest is a forest of Ly-alpha emitting galaxies, which are seen in absorption against a background of Ly-alpha emission from distant galaxies. The Ly-alpha forest is a probe of the matter distribution on scales from 10 kpc to 100 Mpc. The Ly-alpha forest is a forest of Ly-alpha emitting galaxies, which are seen in absorption against a background of Ly-alpha emission from distant galaxies. The Ly-alpha forest is a probe of the matter distribution on scales from 10 kpc to 100 Mpc.

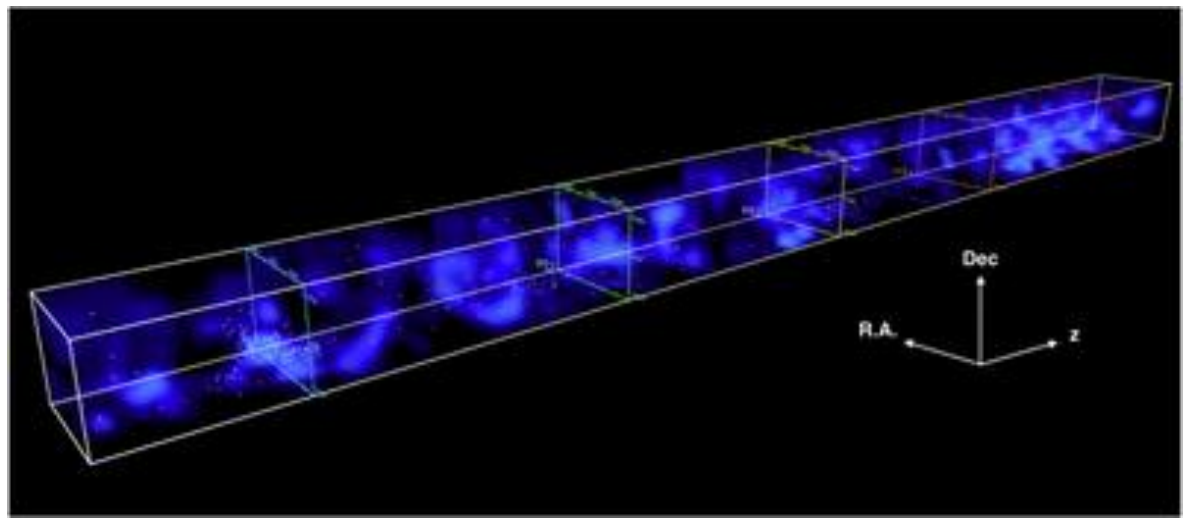
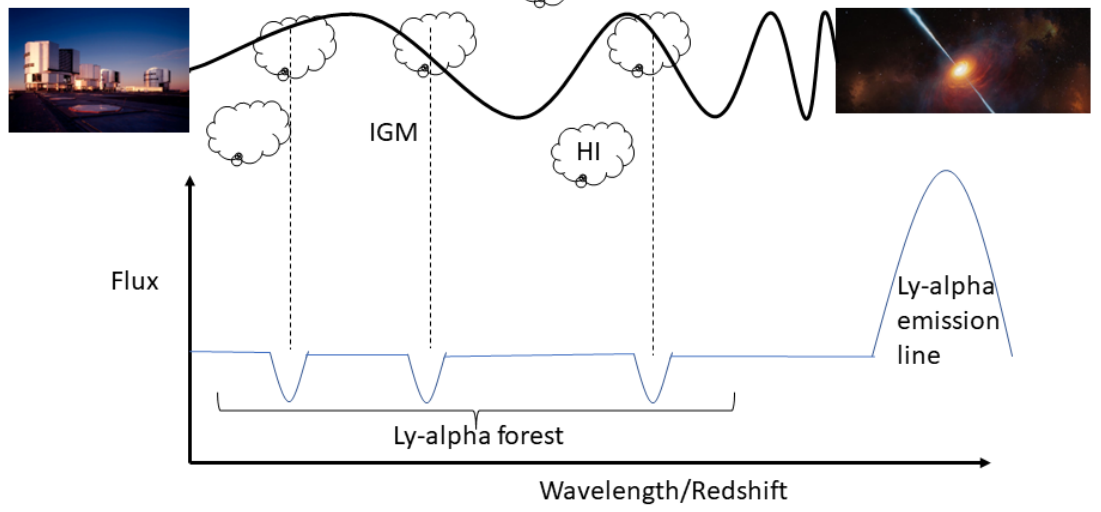
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Ly-alpha forest tomography
Ly-alpha forest tomography is the process of measuring the Ly-alpha forest absorption lines in order to trace the distribution of dark matter in the universe. It is a probe of the matter distribution on scales from 10 kpc to 100 Mpc.

Absorption line profiles
The Ly-alpha forest absorption lines are characterized by their shape and depth. The Ly-alpha forest absorption lines are characterized by their shape and depth. The Ly-alpha forest absorption lines are characterized by their shape and depth.

Testing fundamental physics
The Ly-alpha forest is a probe of the matter distribution on scales from 10 kpc to 100 Mpc. It is a probe of the matter distribution on scales from 10 kpc to 100 Mpc. It is a probe of the matter distribution on scales from 10 kpc to 100 Mpc.

References:
Müller, H. (2018). Towards optimal extraction of dark matter signal from the Ly-alpha forest. *Journal of Cosmology and Astroparticle Physics*, 2018(08), 025.



Lee, Krolewski, White et.al. 2018

By inverting the Ly-alpha forest absorption (Ly-alpha forest tomography) we trace the cosmic web in large boxes with an unprecedented longitudinal resolution (~10kpc)

