

# Projet Horizon - Horizon Project

-- Projet Horizon (site interne) - Science - Simulations à grandes échelles - Horizon 4 &#960; --

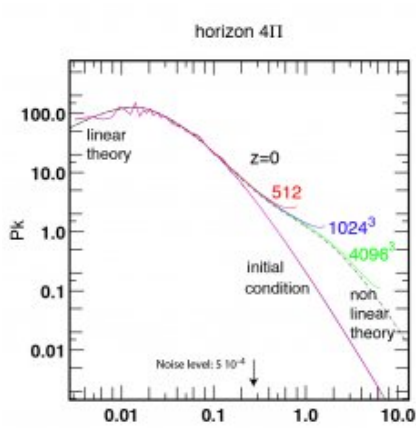
Horizon 4 &#960;

## **Restricted 4pi horizon results**

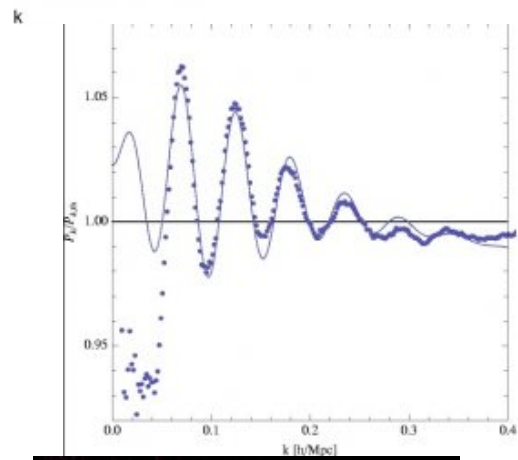
Pichon Christophe  
Monday 22 October 2007

<PDF\_LINK>

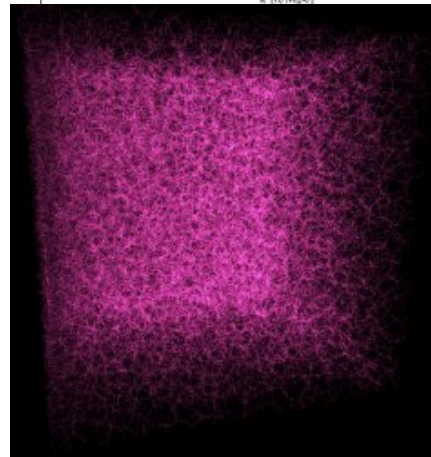
DM Properties



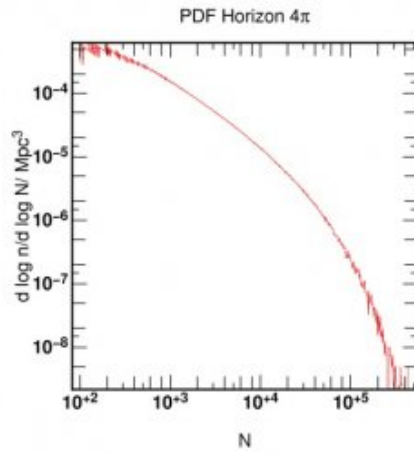
PowerSpectrum of HZ4pi



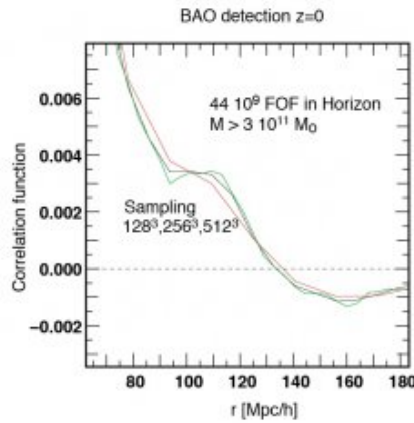
BAO PowerSpectrum



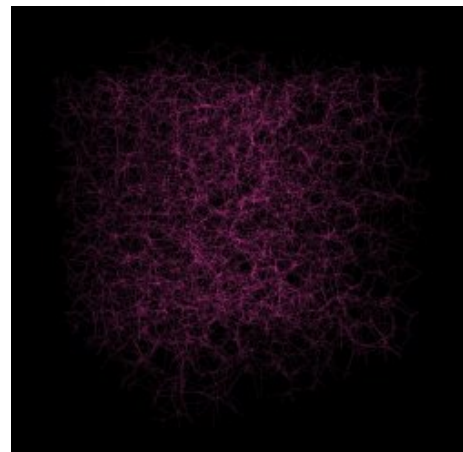
Dark Matter Skeleton of HZ 4Pi  
FoF Catalogs



PDF of HZ4pi



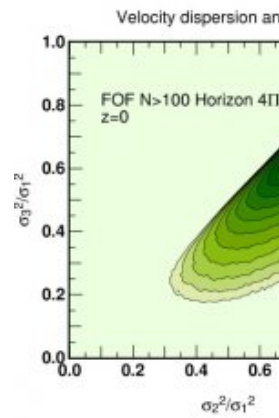
Correlation Function of FOF



FOF skeleton

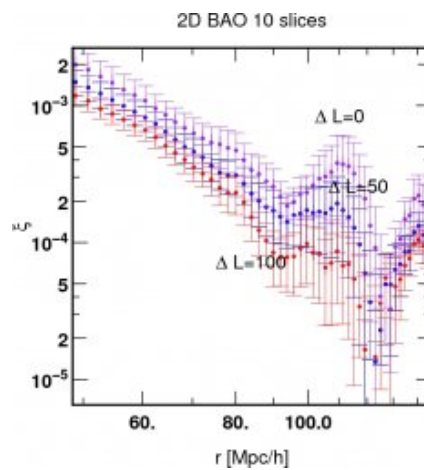
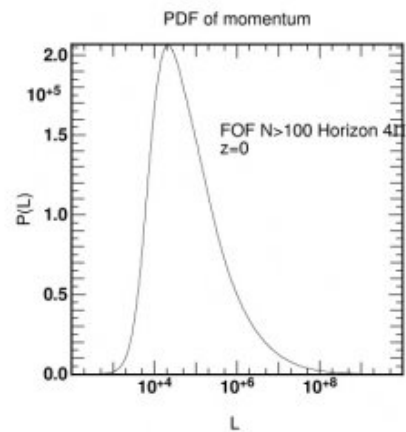


Preliminary FOF catalog At  $z=0$ . 1000 most massive FOF halo

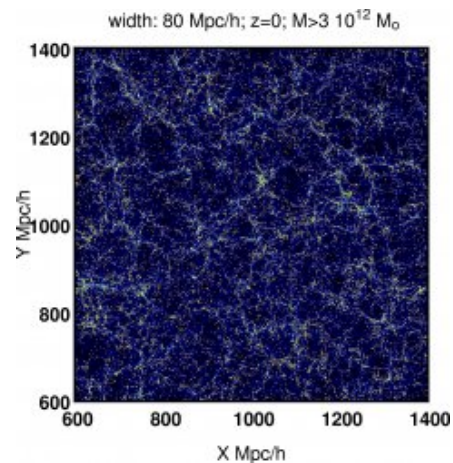


Fof velocity dispersion anisotropy at z=0. Note that the contours are logarithmically spaced.

Extension of FOF Here the bounding box of the FOF is sampled in physical units. Note that the contours are logarithmically spaced.

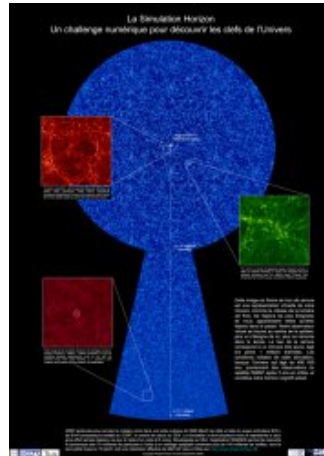


BAO with z-photos in horizon-4pi z=0 FOF catalog is splitted in 10 in z direction and for each slice a 2D correlation function is computed. Before splitting random error in the z direction with RMS 50 and 100 Mpc/h is added.



---

Fof catalog on top of field Corresponding to a BOSS like setting of  $3 \cdot 10^4$  galaxies /  $(\text{Mpc}/h)^3$   
communication A qualitative description of the simulation is shown on this poster:



LightCone of HZ4Pi Here an artistic view of Horizon 4Pi (c) R. Teyssier  
which is also available at higher resolution [there](#)

# Table of Contents

**Restricted 4pi horizon results** ..... 1