

The Clustered Universe

Het geclusterde heelal

Proefschrift

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Steven Rieder
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Promotiecommissie

Promotores:	Prof. dr. Simon Portegies Zwart Prof. dr. Cees de Laat	(Universiteit van Amsterdam)
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*Nou moe!?!
-- Guust¹*

¹Franquin (1972)

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Acronyms and used codes

Acronyms

2dFGRS	Two-degree-Field Galaxy Redshift Survey
CDM	Cold Dark Matter
CGV	CosmoGrid Void system
CMB	Cosmic Microwave Background
DEISA	Distributed European Infrastructure for Supercomputing Applications
GBBP	Gravitational Billion Body Problem
GLIF	Global Lambda Integrated Facility (http://glif.is)
Λ CDM	Lambda Cold Dark Matter
SDSS	Sloan Digital Sky Survey
SPH	Smoothed-particle hydrodynamics
TCP	Transmission Control Protocol
TreePM	Tree-Particle-Mesh
VGS	Void Galaxy Survey
WMAP	Wilkinson Microwave Anisotropy Probe

Used codes

AMUSE	Astrophysical Multipurpose Software Environment
Bonsai	GPU-enabled Tree code (Bédorf et al. 2012)
Consistent Trees	Gravitationally Consistent Halo Catalogs and Merger Trees for Precision Cosmology (Behroozi et al. 2013b)
DTFE	Delaunay Tessellation Field Estimator
FFTW	Fastest Fourier Transform in the West (Frigo and Johnson 2005)
Fi	N-body/SPH code
GRAFIC	Code to generate initial conditions for cosmological simulations
GreeM	GRAPE TreePM (Yoshikawa and Fukushige 2005; Ishiyama et al. 2009b)
MPGRAFIC	Parallellised version of GRAFIC
MPWide	Light-weight communication library for distributed computing (Groen et al. 2010)
NEXUS+	Algorithm for the identification of Cosmic Web Environments (Cautun et al. 2013)
ph4	GPU-enabled direct N-body code
Rockstar	Robust Overdensity Calculation using K-Space Topologically Adaptive Refinement (Behroozi et al. 2013a)
SUSHI	Simulating the Universe Structure formation on Heterogeneous Infrastructures (Groen et al. 2011)