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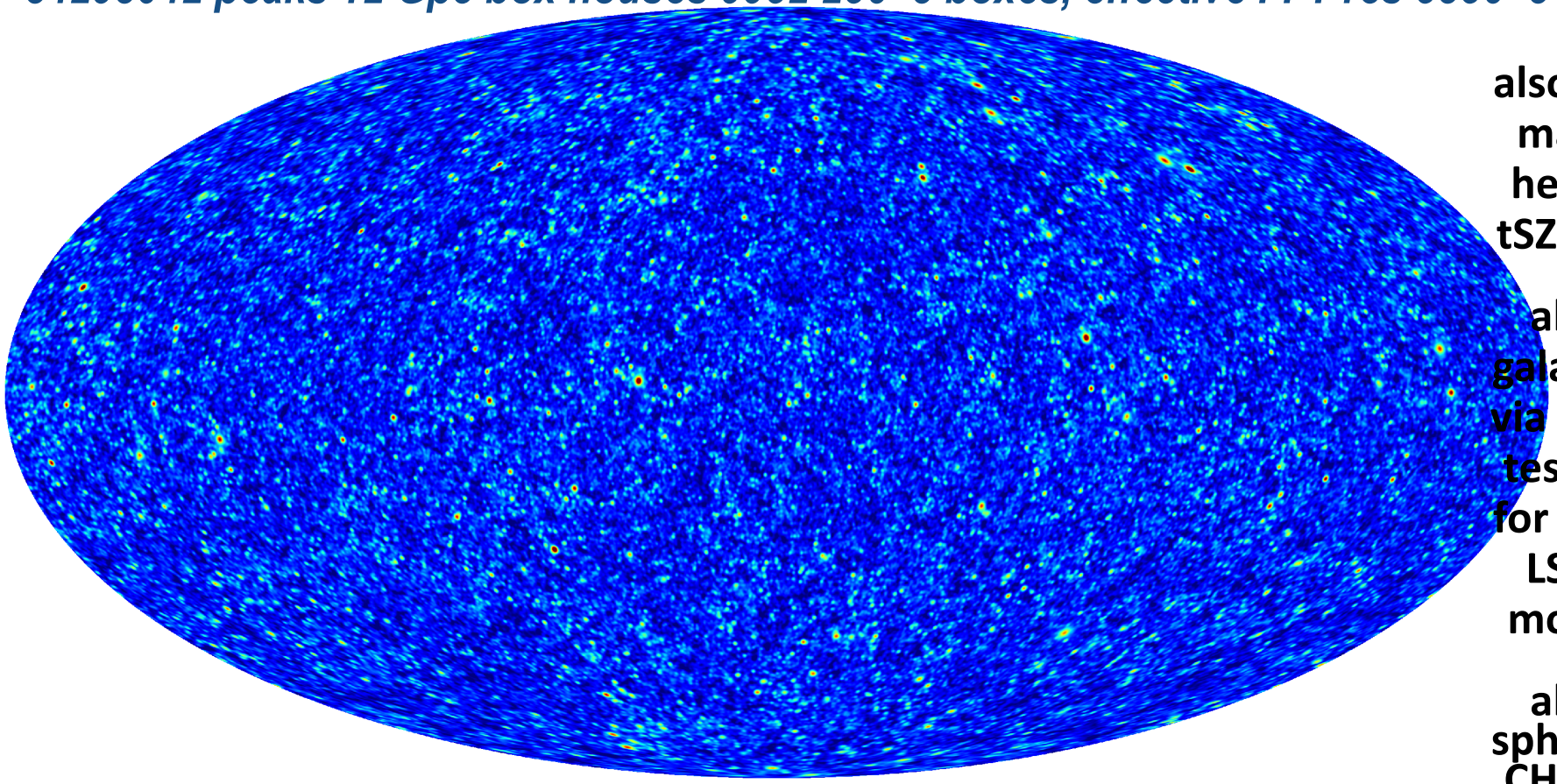

also CIB maps hence tSZxCIB

also galaxies via HOD testing for DES, LSST mocks

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CITA mini-industry

Alvarez, Bond, Hajian, Stein, Battaglia, Emberson,..2015

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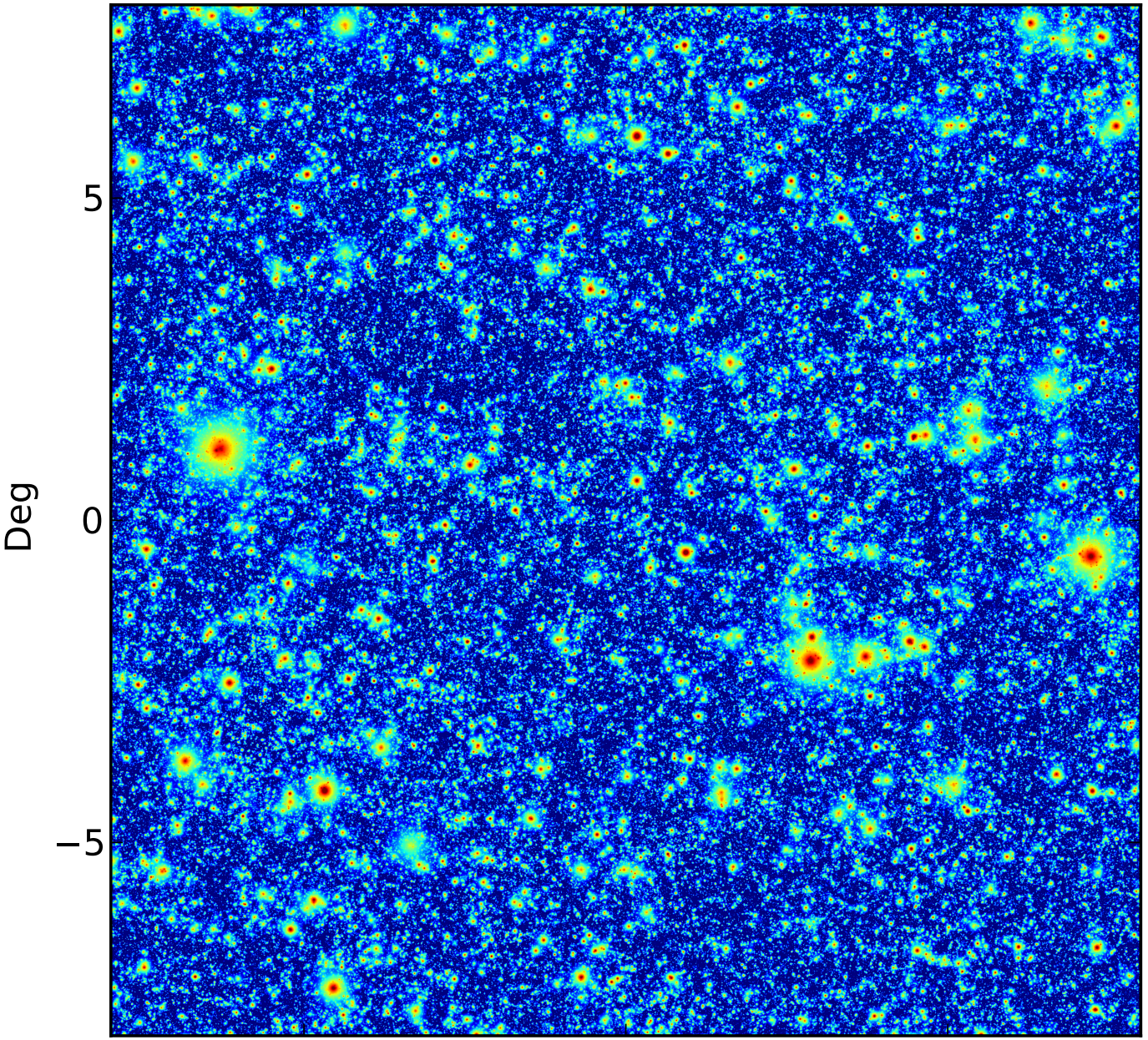
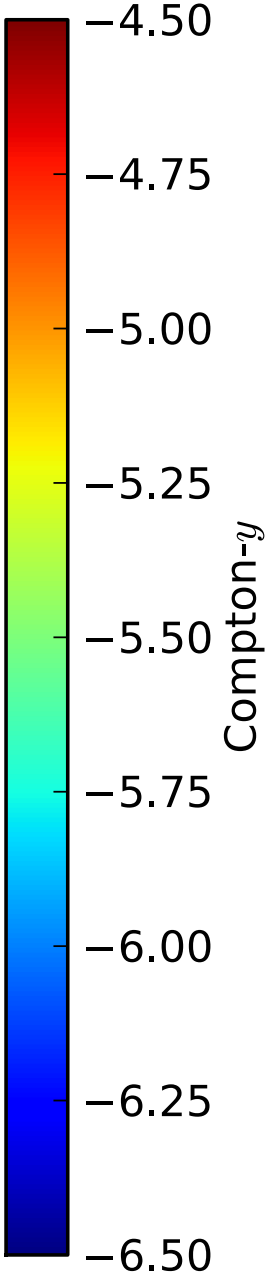
lots of structure. open: what is the relation of gastrophysics at higher z (~ groups) cf. lower z (~ cls)





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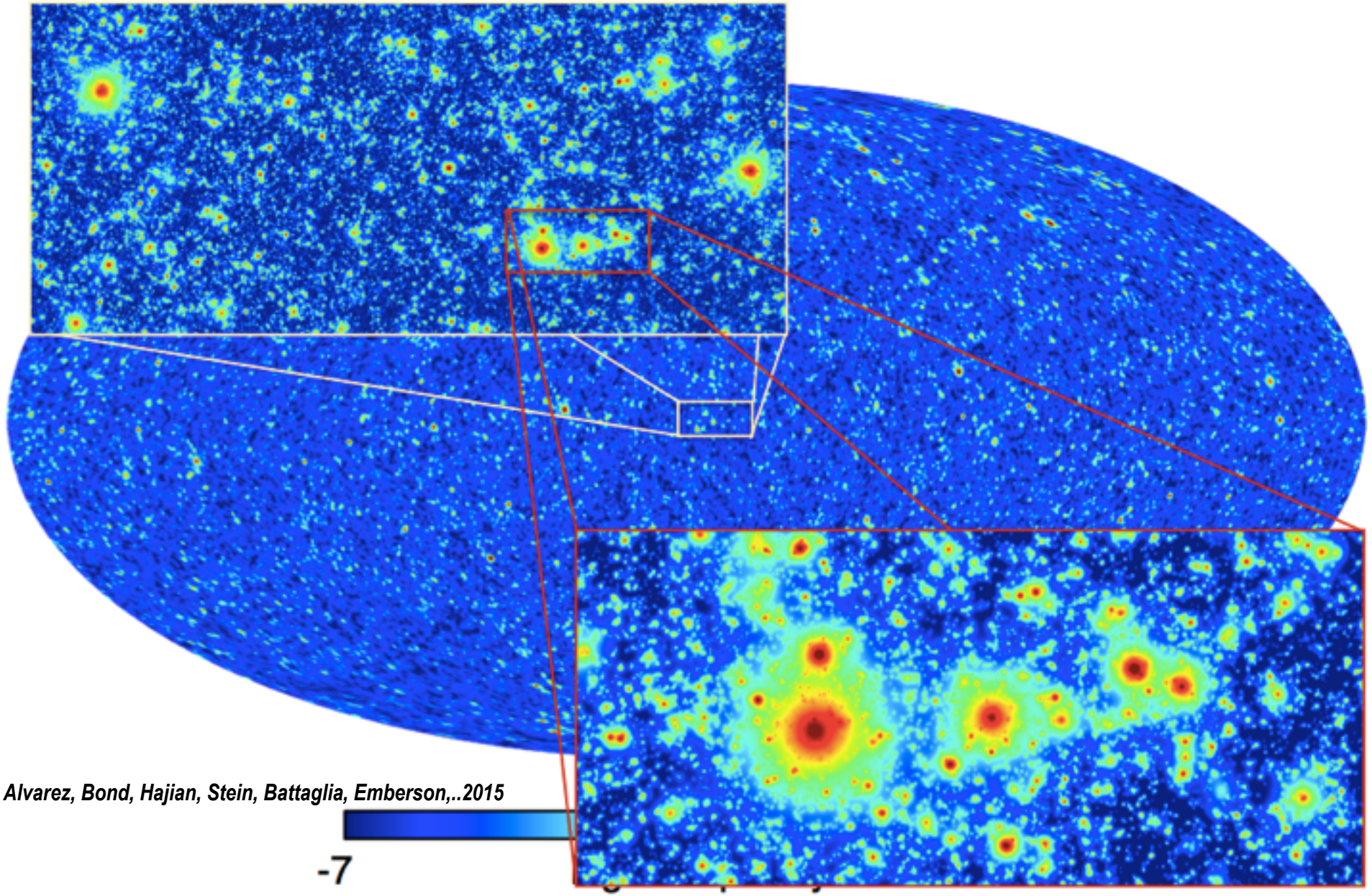

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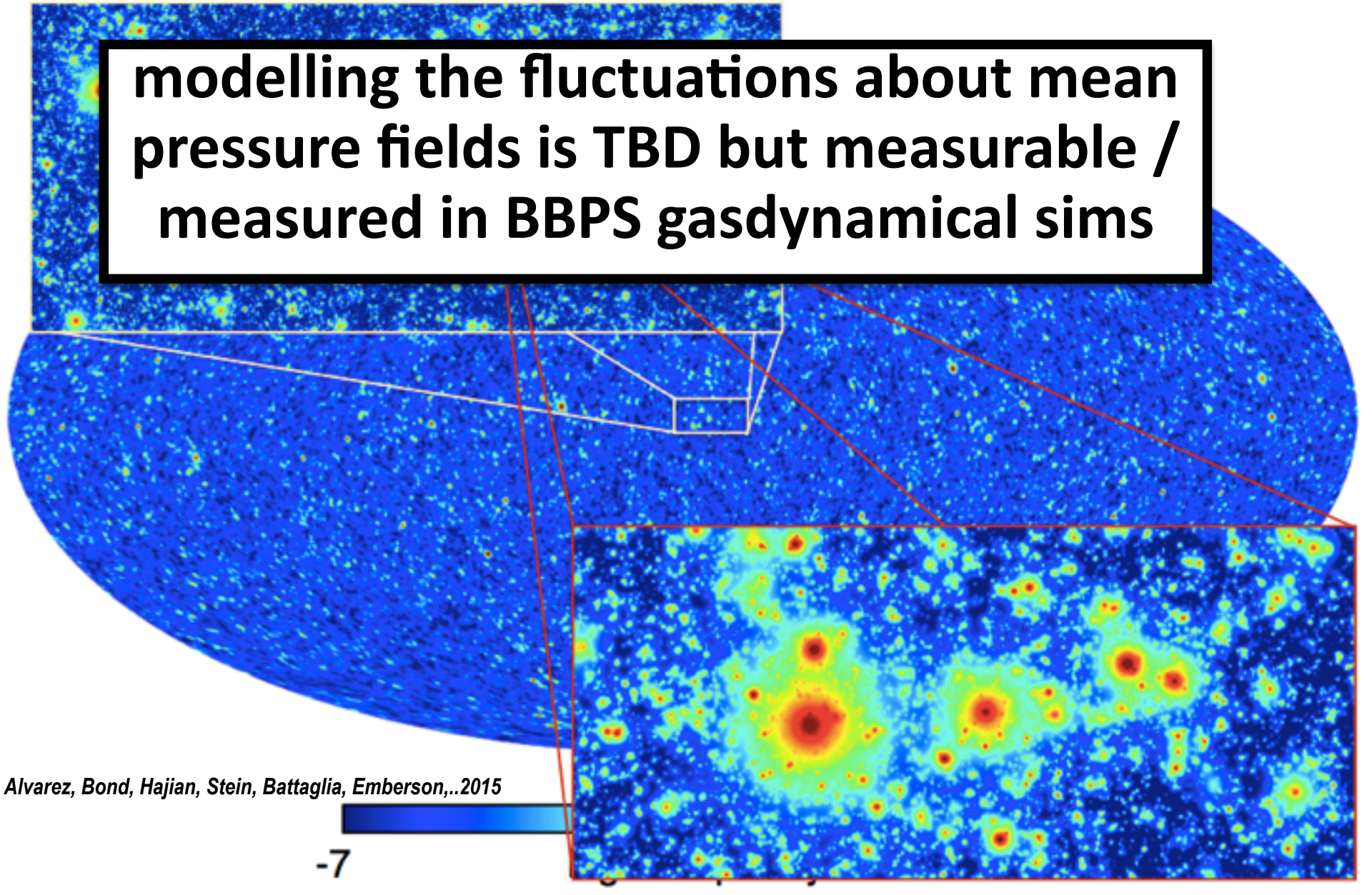

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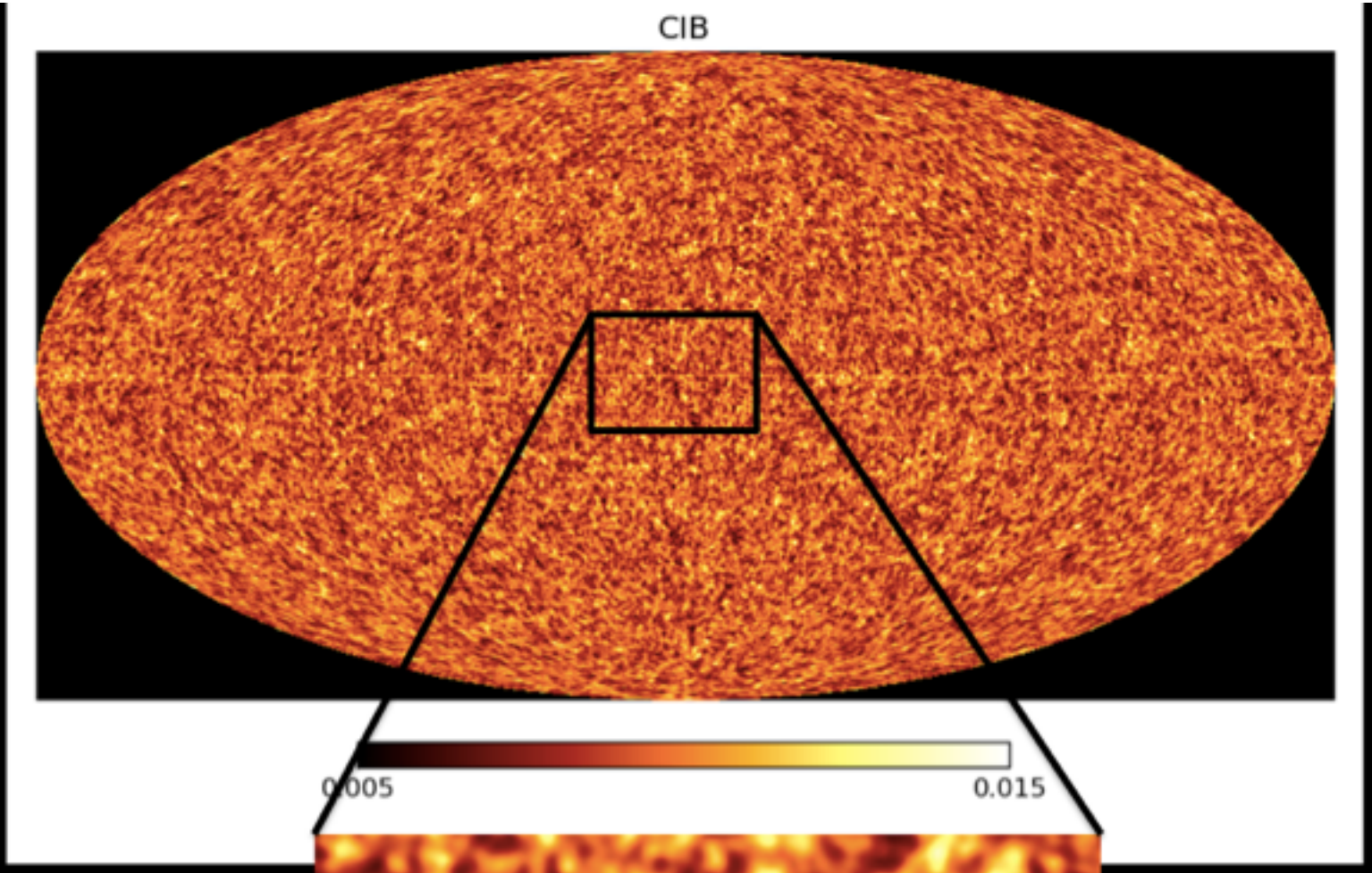
-7



CIB maps hence tSZxCIB

galaxies via HOD

Planck CIB halo model

..so far

Alvarez, Bahmanyar, Bond, Hajian, ,..2015

Anita Bahmanyar

August 20, 2014

Simulating primordial non-Gaussianity for clusters, galaxy surveys, CIB, HI, ..

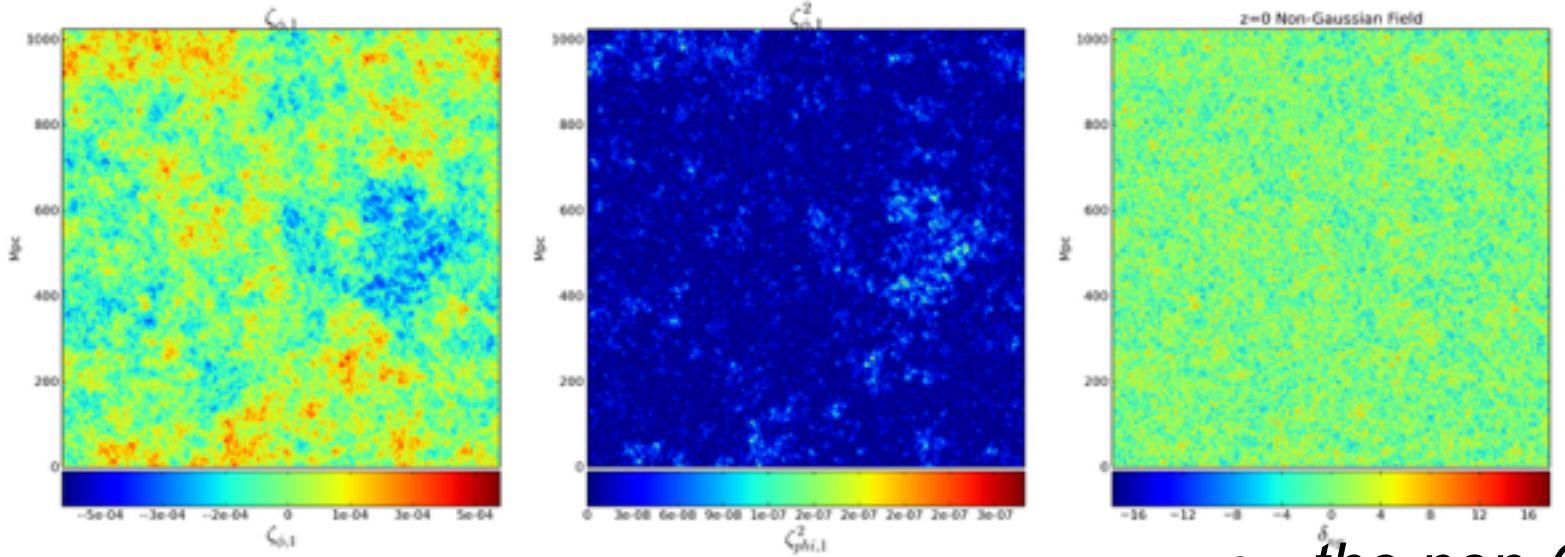
Simulating non-Λ dark energy models

modifying hot gas physics, dust CIB physics, HOD, neutral hydrogen, CO, ..

alatt=1Mpc, N=1024

LSS & nonGaussian mocks

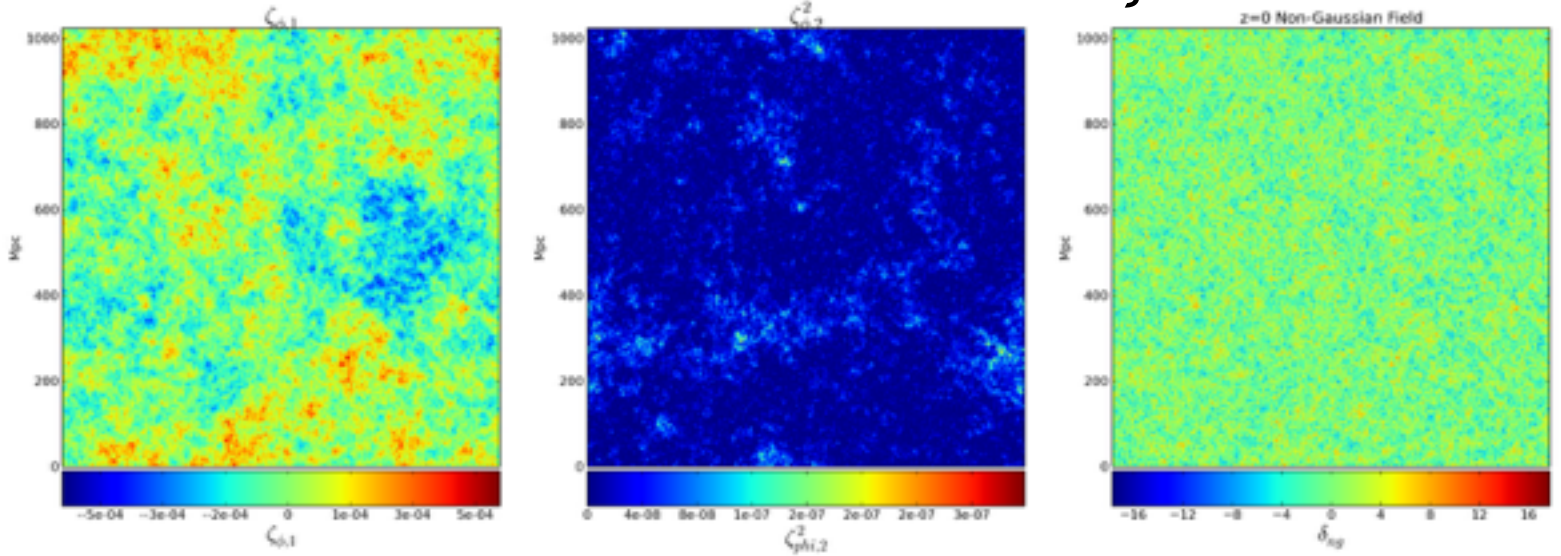
Alvarez,Bond,Huang,Stein,Braden,Frolov14



conventional inflaton-induced correlated ζ^2

conventional but uncorrelated ζ^2

the non-Gaussian initial density field



search with bispectrum & scale-dependent bias in power spectrum

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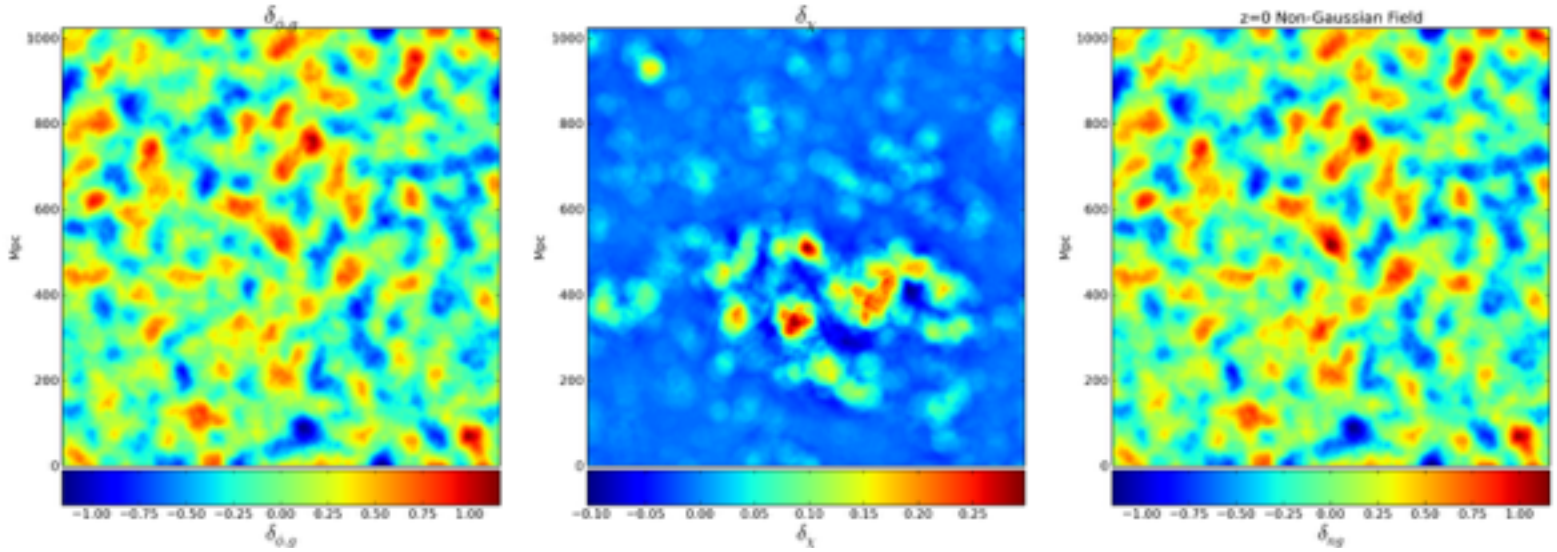
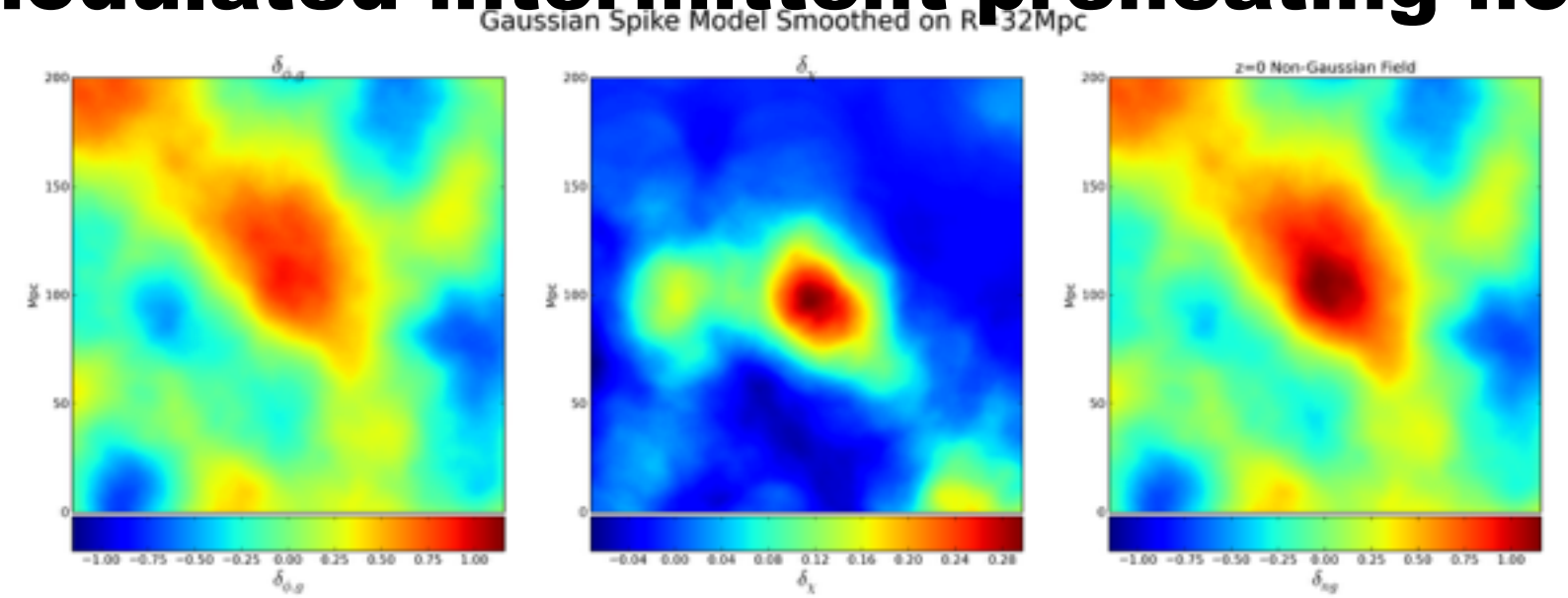


modulated intermittent preheating nonG



search for localized but very large scale rare "events" *e.g., hierarchical peaks*

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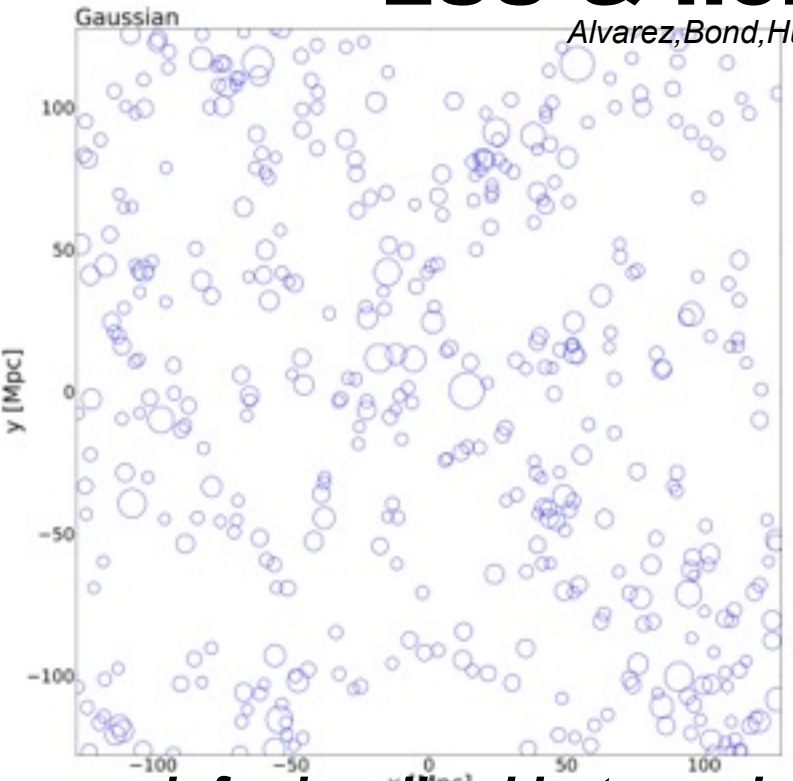
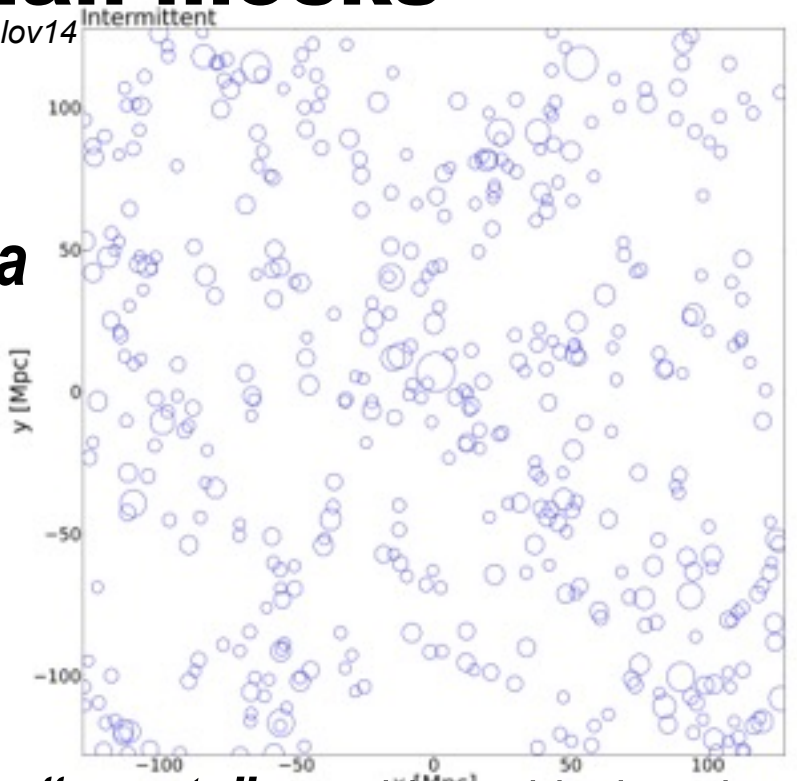


halo nonG patterns galaxies via HoD



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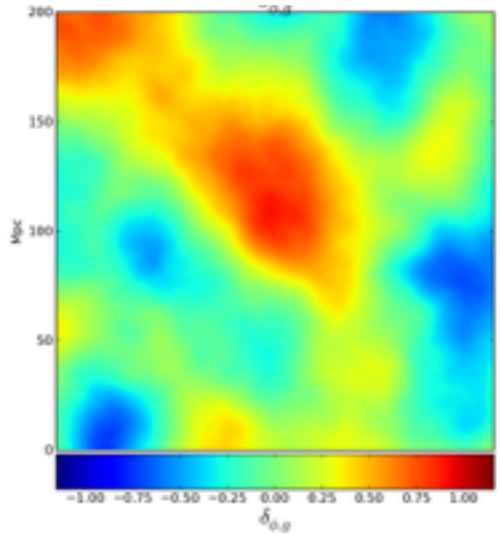

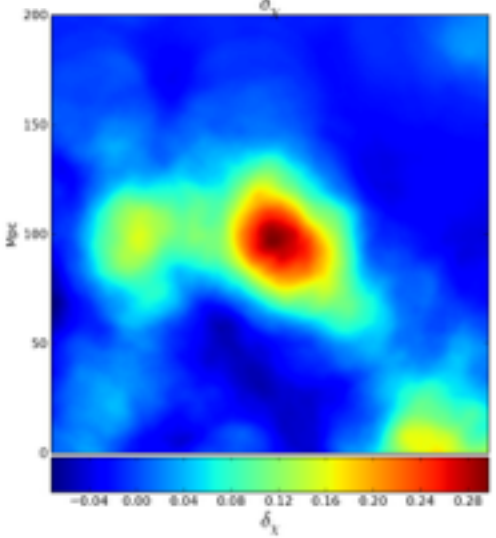

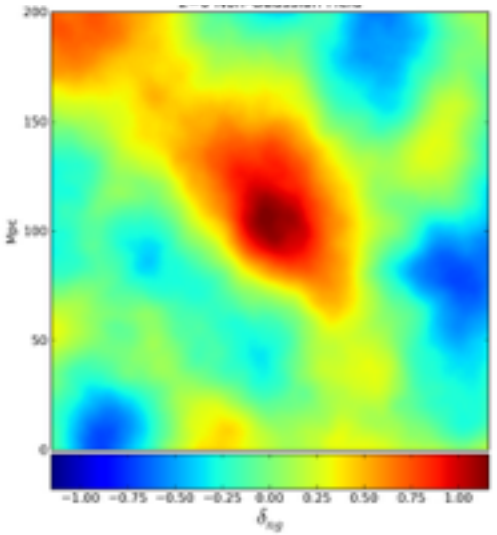

usefulness of the pk patch simulation method for mocking AdvACT?

Planck y-map applications

non-G C_L^{SZ} error statistics

1,2,…N-point distributions in maps BM93/96

kSZ, kappa_lens, …

cross-correlations Xray-tSZ, Lens-tSZ, BCG-tSZ, CIB-tSZ, ..

END

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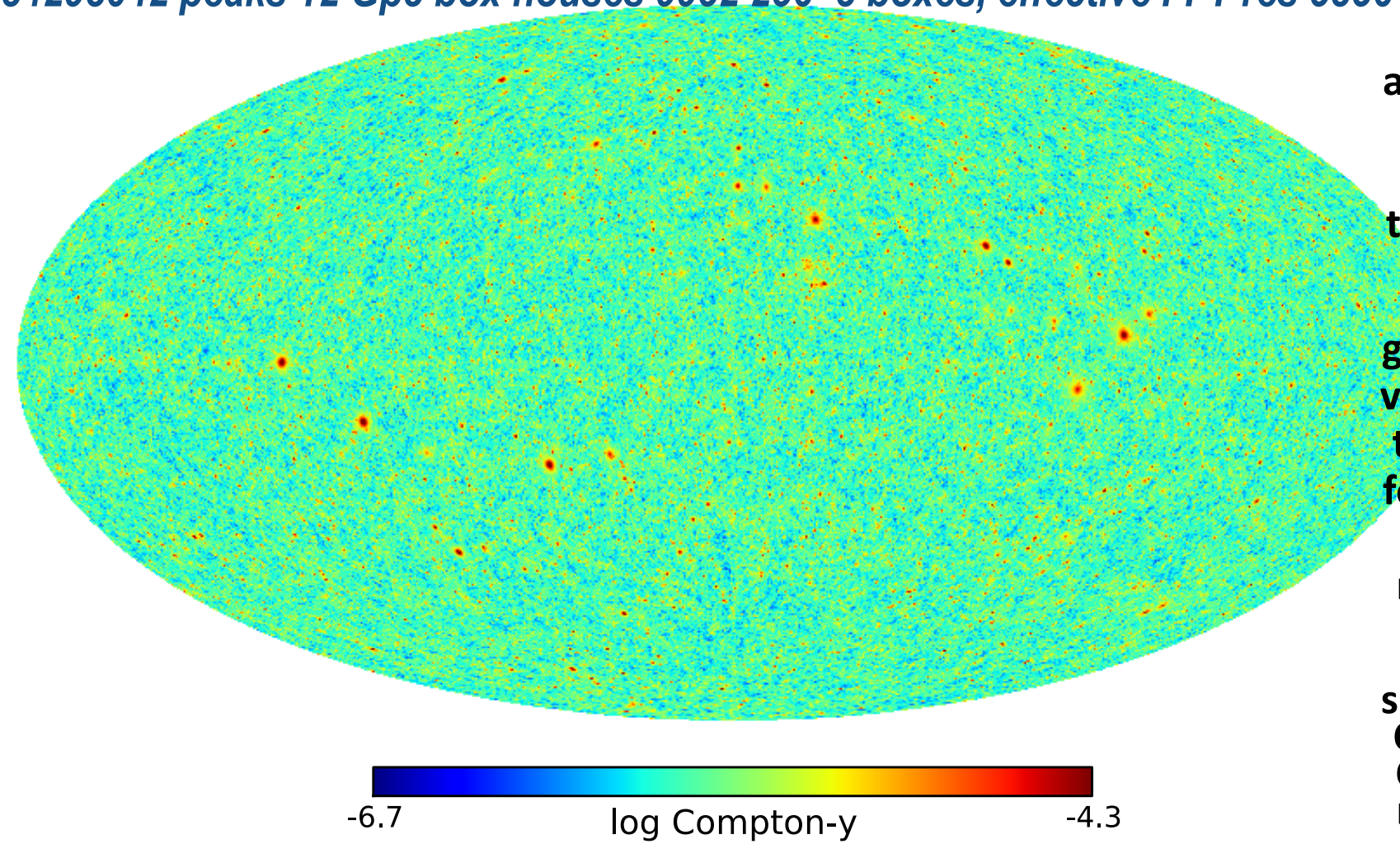

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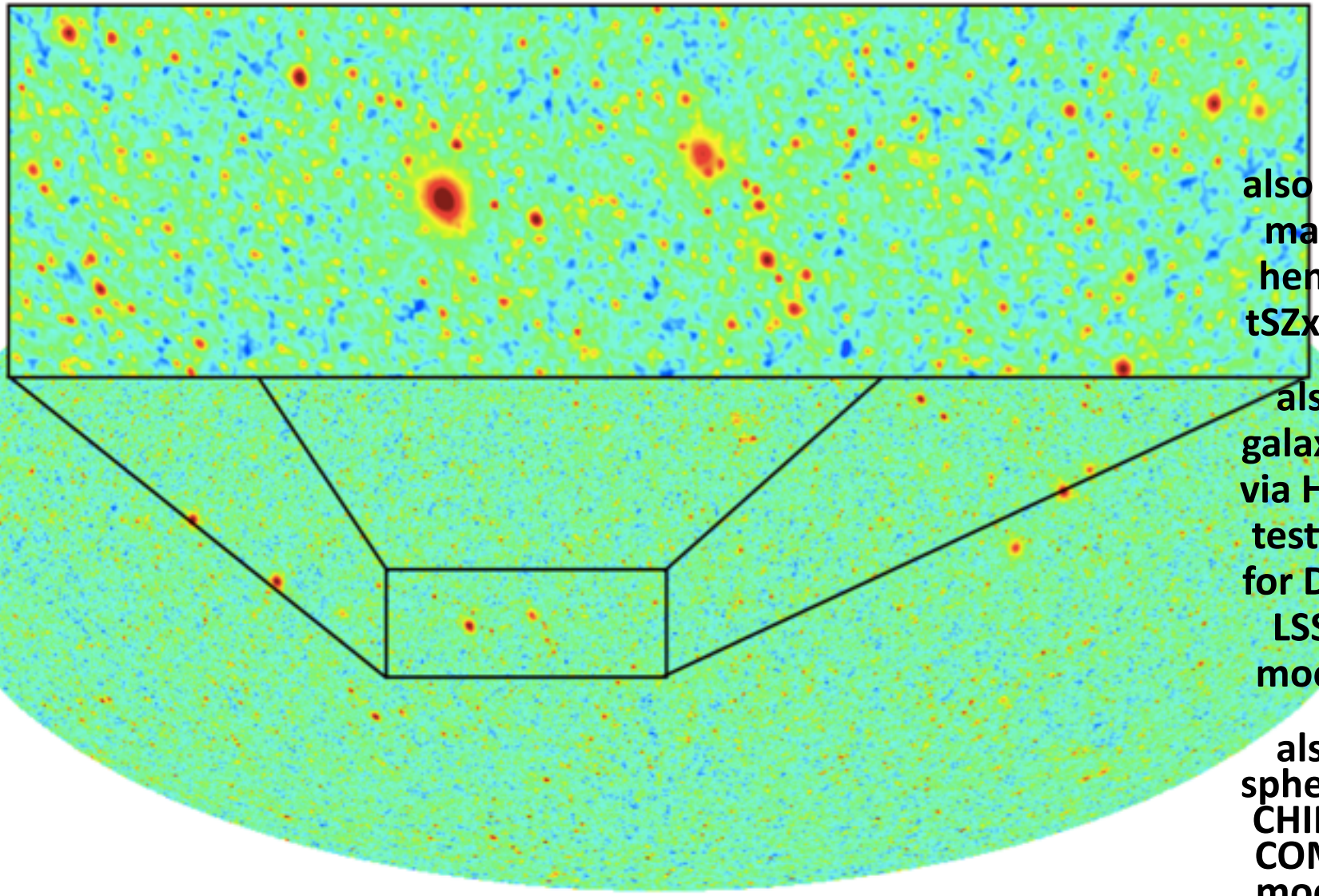

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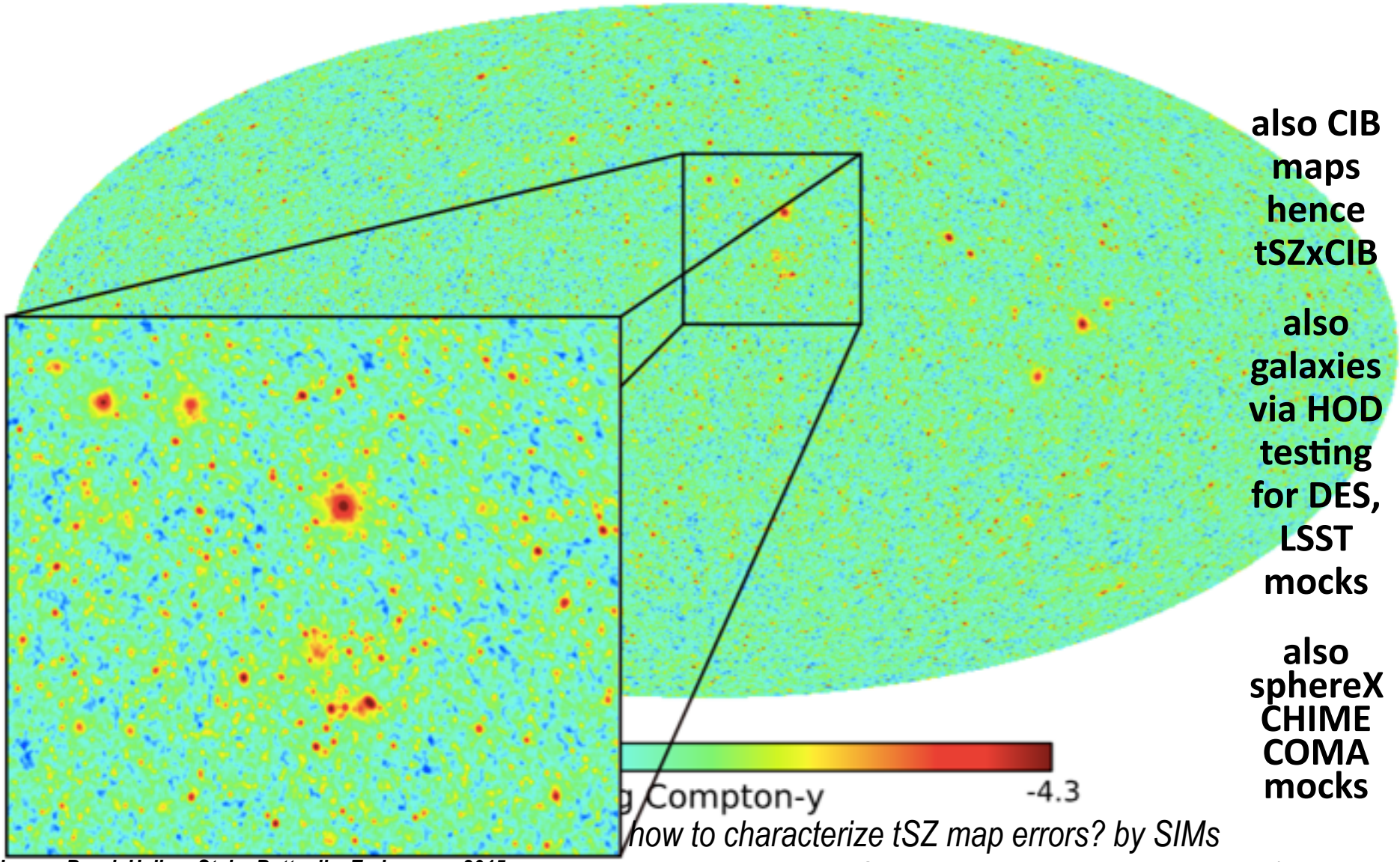

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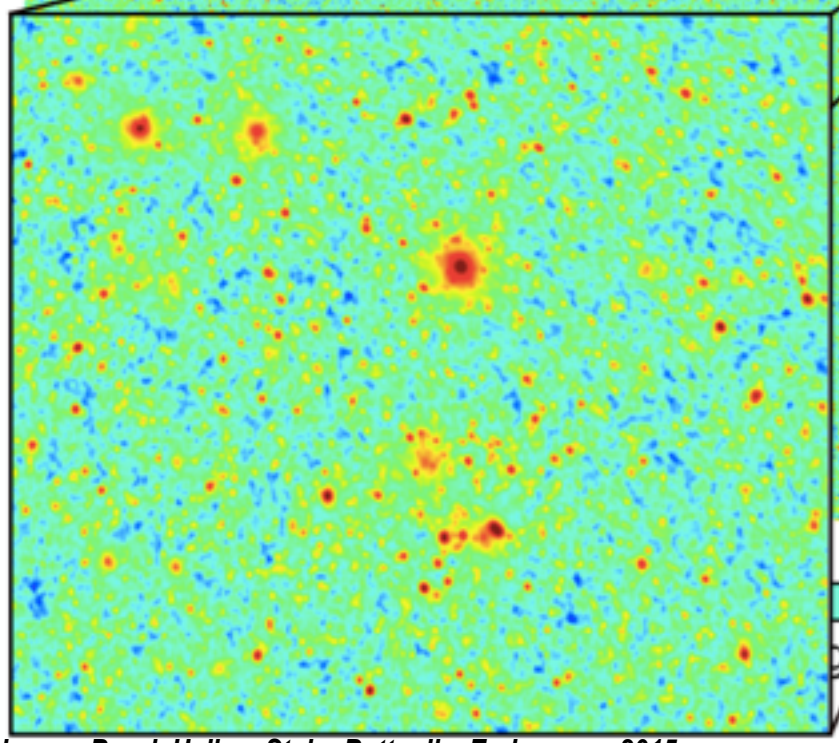

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