



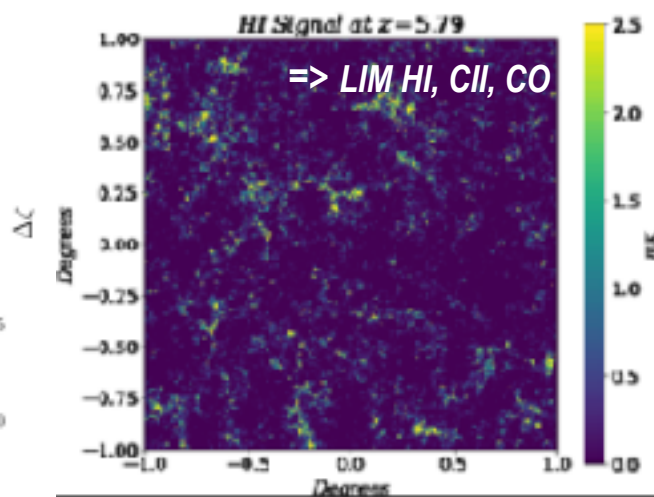
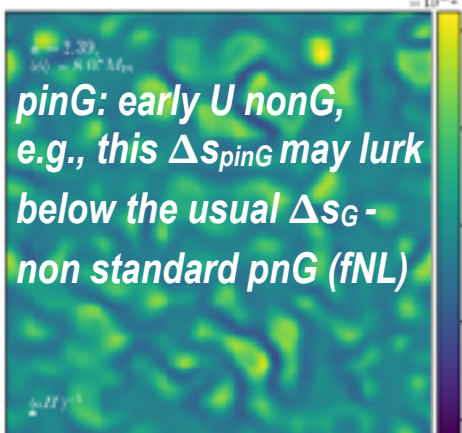
**Dick Bond@CITA 5 grad students now, 3 shared with norm, christ, renee (+2gs -> pdfs) +22 CITAZens in 2013 ... 2023++, 1++ in S4 7 + in SO+ACT + 1-notSO-ACT 7@cita in CCAT +gs TBD**

**webskying U: mini-ensemble SMC is public & used. Beyond SMC TBD gs Carlson+ mocking heaven with PeakPatches+Hydro+eUsims+..**

**A toolkit for CMB+LSS experiments creating ensembles to test Beyond-the-Standard-Model theories CMB+LSS+ = one single vast entangled multi-messenger experiment probing the underlying BSMc 10e-fold LSS (S4, CCATc, SO, Planck, ACT, ..., DES, DESI, Euclid, LSST, ..., CIB, LIM HI, CII, CO) + 50e-fold below**

**entropy and action condensates, fluctuations: the stochastic language emergence of Signals from Noise, and of nonGaussian from Gaussian = Tales of Tails, ... apps: lensed CIB; LIM (CO,CII, HI21cm, HI Lya), tSZ, kSZ**

**CosmicNeutrinoBackground and BBN early U inflation, instabilities give pinGs emergence of coherence in phase and of time (aka still crazy after all these years)**



Entropy in a Coherent Universe:  
 the Quantum Information in  
 the Action of the Cosmic Web

**CITA x ASX**

**STAR TALK**

with Dr. J. Richard Bond  
 on Sep 29 6-7 PM EST @ BA 1220  
 40 St George Street

**CITA ICAT**