Abstract Submitted
for the APR11 Meeting of
The American Physical Society

Voids as probe of dark energy[1] ESFANDIAR ALIZADEH, GUILHEM LAVAUX, RAHUL BISWAS, BENJAMIN WANDELT — Cosmological voids have the potential to be used as probes of the cosmological parameters. I will present our results on how sensitive some properties of voids, i.e. their ellipticies and number counts, are to the equation state of the dark energy. We used the Fisher matrix analysis to forecast the error bars on "w" using the void statistics combined with other cosmological probes to argue that the use of voids improves upon other probes with essentially no extra cost.

[1]This work is supported by NSF grant AST 07-08849.

Esfandiar Alizadeh
University of Illinois

Date submitted: 18 Jan 2011 Electronic form version 1.4