

Curriculum Vitae

Michael J. Barnard

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Higher Education

1. University of California, Davis; Ph.D. (expected Summer 2008, A. Albrecht)
2. University of California, Davis; BS June 2000 (In Physics, with honors)

Publications

1. “On Open Inflation, the string theory landscape and the low CMB quadrupole” Michael Barnard, Andreas Albrecht. arXiv:hep-th/0409082
2. “Exploring Parameter Constraints on Quintessential Dark Energy: the Albrecht-Skordis model” M. Barnard, A. Abrahamse, A. Albrecht, B. Bozek, Mark Yashar, arXiv:0712.2875 [astro-ph] (PRD in press).
3. “Exploring Parameter Constraints on Quintessential Dark Energy: the Pseudo-Nambu-Goldstone Boson model” A. Abrahamse, A. Albrecht, M. Barnard, B. Bozek, arXiv:0712.2879 [astro-ph] (PRD in press).
4. “Exploring Parameter Constraints on Quintessential Dark Energy: the Exponential model” B. Bozek, A. Abrahamse, A. Albrecht, M. Barnard arXiv:0712.2884 [astro-ph] (PRD in press).
5. “A measure of the impact of future dark energy experiments based on discriminating power among quintessence models” M. Barnard, A. Abrahamse, A. Albrecht, B. Bozek, Mark Yashar, arXiv:0804.0413 [astro-ph].

Talks

1. “Constraining Albrecht-Skordis Quintessence with DETF Data Models” at the Cosmology in Northern California Workshop 5/11/07, UC Davis
2. “What can we learn from future dark energy probes?” Invited talk at the APS spring meeting, St. Louis, April 14, 2008.
3. “What can we learn from future dark energy probes?” at the Cosmology in Northern California Workshop 4/18/08, Stanford Linear Accelerator Center.

Other Research

Write-ups of some of my explorations into other areas of research, including singularity theorems, the primordial power spectrum, and the dynamics of scalar fields in General Relativity, are available at <http://virgo.physics.ucdavis.edu/~barnard/>.

Teaching

I have extensive TA experience (2000-2007) in teaching lower division under-graduate physics courses for majors, "pre-med," and non-science major students.