Abstract Submitted for the DPP11 Meeting of The American Physical Society

**The Origin and Evolution of Cosmic Magnetic Fields**<sup>1</sup> ELLEN ZWEIBEL, U. Wisconsin-Madison — Magnetic fields are observed in galaxies, clusters of galaxies, and possibly the intergalactic medium. In some cases, the fields display coherent structures on scales much larger than the turbulent injection scale. I will summarize the evidence for magnetic fields on cosmic scales in the contemporary Universe and in the distant past, and discuss current theories for their origin and evolution.

<sup>1</sup>Work supported by NSF Grant PHY0821899 to the Center for Magnetic Self-Organization.

Ellen Zweibel U. Wisconsin-Madison

Date submitted: 21 Jul 2011

Electronic form version 1.4