

Abstract Submitted  
for the DPP06 Meeting of  
The American Physical Society

**Diagnostic Systems for the Colorado FRC Experiment**<sup>1</sup> S.E. WURZEL, D. CARDWELL, C.L. ELLISON, W. HANDLEY, E. MERINO, T. MUNSAT, W. WILLCOCKSON, University of Colorado — A suite of diagnostics is under development for implementation on the Colorado FRC Experiment, a new field-reversed configuration presently under construction. Instruments at various stages of development include a multichord quadrature CO<sub>2</sub> interferometer, a multichannel Mach-probe array, a multifrequency reflectometry system, and a number of magnetic diagnostics. Each instrument in the diagnostic set is intended for measurement of fluctuating quantities, and all systems are frequency-limited only by the data acquisition rate ( $\geq 10$  MHz). Technical details and preliminary results will be presented.

<sup>1</sup>Supported by U.S. DOE contract DE-FG02-05ER54841.

Samuel Wurzel  
University of Colorado

Date submitted: 25 Jul 2006

Electronic form version 1.4