APR05-2005-000183 E

> Abstract for an Invited Paper for the APR05 Meeting of the American Physical Society

The University of Minnesota Physics Force: Large-scale Demonstration Shows in Schools and Public Outreach CYNTHIA CATTELL, SPA, University of Minnesota, NANCY BRESNAHAN, Hopkins High School

The Physics Force is an outreach program of the University of Minnesota School of Physics and Astronomy, which consists of two teams, each made up of one or two UM professors and three or four high school physical science teachers. Physics Force presents exciting and entertaining programs to K14 students and the general public and the two teams reached approximately 40,000 students in the last year. Physics Force uses large scale demonstrations in their shows, and, in addition, has begun to develop small scale demos and related curriculum materials for teachers to use before and after shows, which are disseminated through their website. The authors are members of the 'Next Generation' team, which has an emphasis on schools with large minority populations and geographically isolated school districts, such as those in northern Minnesota. We will present sample demonstrations and discuss our approach to conveying the fun and excitement of physics to a very broad range of ages and audiences.