Abstract Submitted for the APR11 Meeting of The American Physical Society

Particle Physics Outreach: Engaging Students by Chartering a Plane for Cosmic Ray Experiments JESSE CHVOJKA, University of Rochester — New York State has a very prescriptive physics curriculum with little room for adding material from frontier research, but significant requirements for laboratory projects. As a beginning PhD student, I collaborated with a teacher and her classroom on a project to study the variation of cosmic rays with altitude. The students helped build a cosmic ray detector that was flown on a chartered plane which took data at various altitudes. The students analyzed the data to verify relativistic time dilation in cosmic ray muons and then presented the results to their peers. I discuss the outcome of the project and lessons that I took away from the effort.

> Jesse Chvojka University of Rochester

Date submitted: 14 Jan 2011

Electronic form version 1.4