

SES08-2008-000260

Abstract for an Invited Paper
for the SES08 Meeting of
the American Physical Society

Research and career opportunities in the geophysical sciences for physics students

ANDREW NYBLADE, Penn State University

The field of geophysics involves using most branches of physics to investigate the physical structure and process that characterize the solid and fluid parts of our planet. Major advances in geophysics have come about from physicists crossing disciplinary boundaries and using their skills and knowledge to address first-order problems about the nature and structure of our planet and how the planet has changed over time. Indeed, some of the largest scientific breakthroughs in geophysics have come from physicists. As a way to introduce students to the field of geophysics and to provide them with information about research and career opportunities in geophysics, this talk will focus on one area of geophysics, seismology. This is an area of geophysics that has not only been instrumental in advancing our understanding of solid Earth structure and processes, but one that also has an applied side used for oil, gas and mineral exploration, as well as for environmental work. Examples of research projects involving seismic wave propagation and tomographic imaging will be presented, along the short descriptions of career opportunities in industry, government and academic institutions. In collaboration with Solomon Bililign, North Carolina A&T State University.