Bringing Technology into college and High School Physics Classrooms

Nouredine Zettili, Jacksonville State University — We want to present ideas on ways of bringing technology to college and high school physics classrooms. We focus in particular on our outreach initiative in supporting a number of school districts with ways to improve high school physics education. This initiative is part of Project IMPACTSEED (IMproving Physics And Chemistry Teaching in SEcondary Education), a No-Child Left Behind grant funded by the Alabama Commission on Higher Education. This project is motivated by a major local need: A large number of high school physics teachers teach out of field. IMPACTSEED aims at helping high school teachers learn and master the various physics topics required by the Alabama course of study. Teachers are offered year-round support through a rich variety of programs: a two-week long summer institute, a series of five technology workshops, and onsite year-round support. Through our hands-on approach, we have identified a number of ways of bringing technology into physics classrooms. A number of technology projects were assigned to the teachers so as to show their students how physics connects to the technological devices around us. IMPACTSEED aims at providing our students with a physics education that enjoys continuity and consistency from high school to college.