“Wow” is good, but “I see” is better - techniques for more effective Physics demonstrations

STEPHEN COLLINS, Academy of the Sacred Heart

The use of demonstrations to assist in Physics education at all levels is commonplace, but frequently lacks optimal effectiveness. In many cases, the choice of demonstration is not at issue, but rather the manner in which it is presented to the audience. Modern educational research reveals a number of simple ways to improve instruction of this kind, including objective setting, audience evaluation, concept building, and promoting engagement. These techniques and considerations will be reviewed, explained, and modeled through a demonstration of “Why Mr. Fork and Mr. Microwave Oven don’t get along.”