

Conferencias

Jueves 25 de mayo



**The Development of Efforts to
Address Students'
Mathematical Difficulties in
Physics**

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David Elliott Meltzer

16:30 – 17:45

The Development of Efforts to Address Students' Mathematical Difficulties in Physics*

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[*Supported in part by NSF DUE #1504986]

For almost 100 years, physics educators have investigated the mathematical difficulties encountered by physics students, and have looked for ways to address those difficulties so that students could improve their performance in physics courses. I will review some of the work that has been done, starting in 1918, and continuing up until the present day. I will also focus on work being done by our group at Arizona State University to investigate the specific mathematical difficulties encountered by students enrolled in introductory university physics courses. In particular, we have explored students' difficulties with techniques and concepts in trigonometry, algebra, and vector representation. I will discuss some of the ideas that we and others are investigating for addressing and remedying these difficulties within the context of the physics courses themselves, instead of relying solely on students' studies in mathematics courses to fix the problems.