

Session DG: PER: Student Content Understanding, Problem-Solving and Reasoning

Location: Plaza Ballroom I

Sponsor: AAPT

Time: 11 a.m.–12 p.m.

Date: Monday, Jan. 14

President: Alexandru Maries

DG01: 11-11:10 a.m. Physics Students' Familiarity with Mathematical Facts and Procedures*

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As part of our continuing investigation into mathematical difficulties of introductory physics students, we have incorporated new questions on elementary geometry and graphing on our diagnostic tests, and extended our exploration of difficulties with symbolic operations. Our results suggest specific areas in which additional practice by students may be needed to facilitate their problem-solving activities, and warrant additional caution that students' familiarity with basic mathematical facts and procedures cannot necessarily be presumed.

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