Computational Physics? Some perspectives and responses of the undergraduate physics community

— Any of the many answers possible to the evocative question “What is ...” will likely be heavily shaded by the experience of the respondent. This is partly due to absence of a canon of practice in this still immature, hence dynamic and exciting, method of physics. The diversity of responses is even more apparent in the area of physics education, and more disruptive because an undergraduate educational canon uniformly accepted across institutions for decades already exists. I will present evidence of this educational community’s lagging response to the challenge of the current dynamic and diverse practice of computational physics in research. I will also summarize current measures that attempt respond to this lag, discuss a researched-based approach for moving beyond these early measures, and suggest how DCOMP might help. I hope this will generate criticisms and concurrences from the floor.

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