Peter R. Turner*, pturner@clarkson.edu. SIAM NSF Workshop on Modeling across the Curriculum.

In this talk, the recent SIAM-NSF Workshop on Modeling across the curriculum (August, 2012) will be described, and an introduction to the report will be presented. The meeting proposal pre-dated but responded to the PCAST “Engage to Excel” report and its call for one million new college STEM graduates in the next decade. The meeting had three primary themes: bringing coordinted STEM curriculum content into the middle and high schools within the framework of the common core standards; undergraduate curricula in modeling and computational applied mathematics as the heart of a STEM undergraduate experience; and readiness for college STEM education on graduation from High School. The last theme essentially acts as a basis for assessment of the programs that are developed and how they address the “math gap” often experienced on entry to college degree programs in STEM fields. (Received September 25, 2012)