962-G1-373

Ignatios E Vakalis^{*} (ivakalis@capital.edu), Department of Math and Computer Sc., 2199 East Main Street, Capital University, Columbus, OH 43209. *The Computational Science Paradigm: Connecting Mathematics, Computing and Science*. Preliminary report.

Computational Science is an emerging and rapidly growing interdisciplinary field at the intersection of mathematics, computing and science. It is considered the third methodology in the development of scientific knowledege alongside theory and experimentation. Funded by NSF (DUE 9952806), a comprehensive undergraduate program in computational science is being developed at Capital University. Since modeling is an integral part of any computational experiment, all courses in the new curriculum will have a significant mathematics component. During the talk we will address the overall structure of the curriculum, its integration with existing math/science curricula, and emphasize specific modules from courses such as: Computational Environmental Science, Computational Psychology. (Received September 12, 2000)