

Scott Alan Klasky

Northeast Parallel Architectures Center Phone: 315 443 1690
Syracuse University Fax: 315 443 1973
111 College Place E-mail: scott@npac.syr.edu
Syracuse, NY 13244-4100 URL: <http://www.npac.syr.edu/users/scott>

Education

Ph.D. in Physics from University of Texas at Austin (1989-1994).
B.S. in Physics from Drexel University, Philadelphia PA (1984-1989).

Professional Experience

1996– Senior Research Scientist, NPAC, Syracuse University 1995–1996 Post. Doc. Fellow in Relativity, The University of Texas at Austin

Awards and Honors

Phi Beta Kappa Honors Society 1991

Selected List of Publications:

- [1] “Java based Collaborative Scientific Visualization” (w/ B. Ki), Concurrency: Practice and Experience, accepted 1998.
- [2] “Schwarzschild-Perturbative gravitational wave extraction and outer boundary conditions” (w./ Abrahams et. al.), submitted to Phys. Rev. Letters 1997.
- [3] “Boosted three-dimensional black-hole evolutions with singularity excision” (w/ Cook et. al.), accepted: Phys. Rev. Letters 1997.
- [4] “The Binary Black Hole Grand Challenge ADM code”, (w/ Cook et. al.), to be submitted to Phys. Rev. D, 1998.
- [5] “Collaborative Scientific Visualization” (w/ B. Ki), Concurrency: Practice and Experience, November 1997.
- [6] “Multigrid- An Approach in HPF” (w/ U. Dittmer), NPAC technical report (SCCS-772), 1996.
- [7] “Multigrid support with the DAGH package: Specifications and Applications” (w/ M. Choptuik et al.), Site report, 1995.
- [8] “Visualizing Complex Patterns in the Spread of Head and Neck Cancers,” (w/ L. Gray et al.), The International Journal of Supercomputer Applications 7, 167 (1993).
- [9] “Three-dimensional initial data for the collision of two black holes,” (w/ G. Cook et al.), Physical Review D47, 1471 (1993).
- [10] “Properties of gravitational “solitons” ”, (w/ J. Centrella et al.), Physical Review D43, 379 (1991).

Summary of Interests:

For the last nine years Klasky has designed several major computer codes in the areas of physics, computer science, and numerical analysis. His main area of expertise is in designing large scale codes in the area of computational science. Klasky has lead teams of researchers to develop state-of-the-art computer codes in the area of high performance scientific computing/physics. He has expertise in solving large scale Partial Differential Equations (PDE's), particularly for numerical relativity, using state-of-the-art techniques (Adaptive Mesh Refinement) as well as in designing collaborative visualization tools, to be used over the Internet. He has also designed Monte Carlo codes to price derivatives using a Path Integral Monte Carlo Approach.

Ph.D. Advisor

Richard Matzner