



Dr. Robert A. Fiedler is the Blue Waters technical program manager for Science and Engineering Applications at the National Center for Supercomputing Applications (NCSA). He leads a team of advanced user-support specialists and computational scientists who are working with the developers of a broad range of applications selected by the National Science Foundation to prepare their codes for Blue Waters by the time it goes into production, and to assist them in utilizing the system for scientific discovery. Fiedler previously served 10 years as the technical program manager at the (DOE/NNSA ASC Level 1) Center for Simulation of Advanced Rockets, leading a multidisciplinary team developing a large-scale fully-coupled multiphysics rocket simulation package “Rocstar.” Rocstar has been used to simulate next-generation versions of the Space Shuttle’s Reusable Solid Rocket Motor, providing NASA rocket designers with detailed solutions based on first principles that they could use to validate their simpler engineering models. In earlier positions, he served as a senior technical consultant with Hewlett Packard Co., supporting systems at US Naval Research Lab, and before that at NCSA, first as a postdoctoral research associate and later as a senior research programmer, supporting and developing the ZEUS-MP astrophysics code. He earned a PhD. in physics from the University of Illinois at Urbana.