

A. *Physics World* was written by Jeff Adams. It was developed in support of the Integrated First-Year Curriculum in Science, Engineering, and Mathematics at Rose-Hulman Institute of Technology. This curriculum project is supported by the National Science Foundation, the General Electric Foundation, and Lilly Endowment, Inc. If you are interested in this or any other application written for the Rose-Hulman Institute of Technology Integrated First Year Curriculum, please contact us at **ifycsem@nextwork.rose-hulman.edu**. The following people are currently serving as professors for the curriculum and would welcome your comments and questions:

Dr. Claude Anderson, III, Computer Science
Campus Box 98

ext. 8331

Dr. Jerry Fine, Mechanical Engineering
Campus Box 140
ext. 8353

Dr. Jeffrey Froyd, Electrical Engineering
Campus Box 111
ext. 8340

Dr. Mike Moloney, Physics

Campus Box 161
ext. 8302

Dr. Howard McLean, Chemistry
Campus Box 70
ext. 8378

Dr. Edward Mottel, Chemistry
Campus Box 71
ext. 8315

Dr. Brian Winkel, Mathematics
Campus Box 132
ext. 8412

c/o Rose-Hulman Institute of Technology
6060 Wabash Avenue
Terre Haute, Indiana, USA 47803

phone 812-877-1511
or
812-877- ext.

B. *Physics World* best fits in the physics category.

C. *Physics World* is a physics simulation environment which incorporates particles, user-defined initial positions, velocities, charges and masses and radii. Coefficients of resistive forces may be added to individual particles to simulate air resistance or viscosity as well as an arbitrary constant external acceleration. User-defined external fields with electric, gravitational, and magnetic properties may be placed in the system as well straight wall boundaries. Connections may also be made using springs attached to either a particle and a fixed point, or between two particles.

- D. *Physics World* is used as part of the Integrated First Year Curriculum in physics classes to simulate the interaction of particles, fields, boundaries, and springs.
- E. *Physics World* was developed under NeXTSTEP 2.1.
- F. *Physics World* requires no special installation.
- G. The Documentation folder included with the application is required for online documentation built into the application. If it is removed, the application will still function properly, except for Help.

