

Introduction:

PhysicsWorld is a physics simulation environment which incorporates particles with among other attributes, 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 along with straight wall boundaries. Connections may also be made using springs attached to either a particle and a fixed point, or between

two particles.

Quick Start instructions:

Use the *Particle*, *External Field*, *Boundary*, and *Connection Inspectors* to create particles, fields, boundaries, and springs. Also, particles can be created by clicking and dragging from the *Palette Panel* to the *World View*. Click on the *Start* button to begin the simulation. Clicking on the *Init* button will restart the simulation.