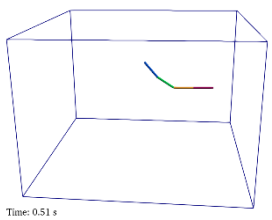
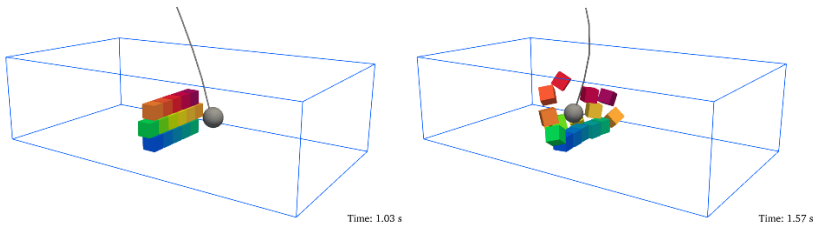
Testcases (main/chrono) included in the full DualSPHysics package v4.4 in http://dual.sphysics.org/index.php/downloads/)

01_PENDULUM

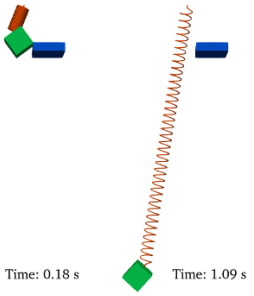
- Several bodies connected with a spherical link (hinge) to mimic a chaotic pendulum. Video
- Previous configuration + a spherical body linked at the end of the chain of bodies that will collide with blocks. Video

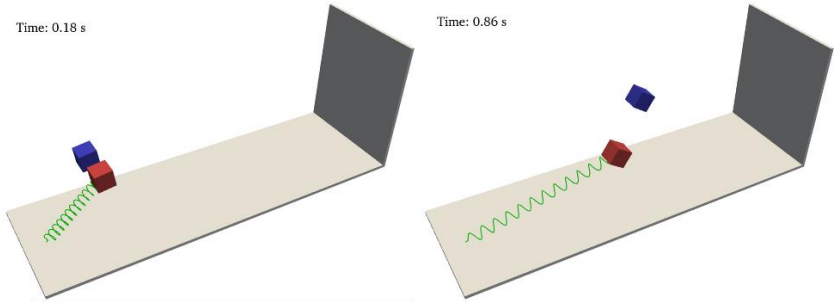




2_SPRING

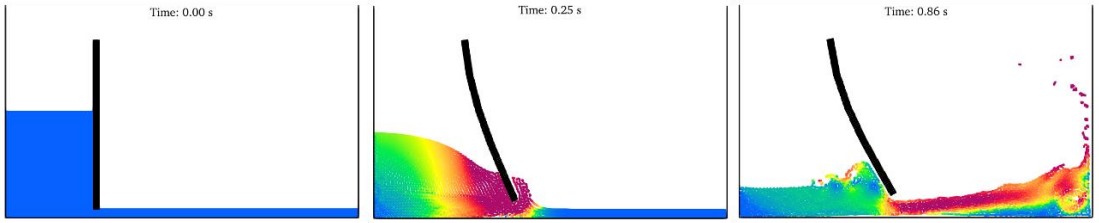
- A block is connected to a fixed point with the linear spring functionality. Video
- Two blocks are initially moved with predefined linear and angular velocity but one of them is connected to a linear spring. Video





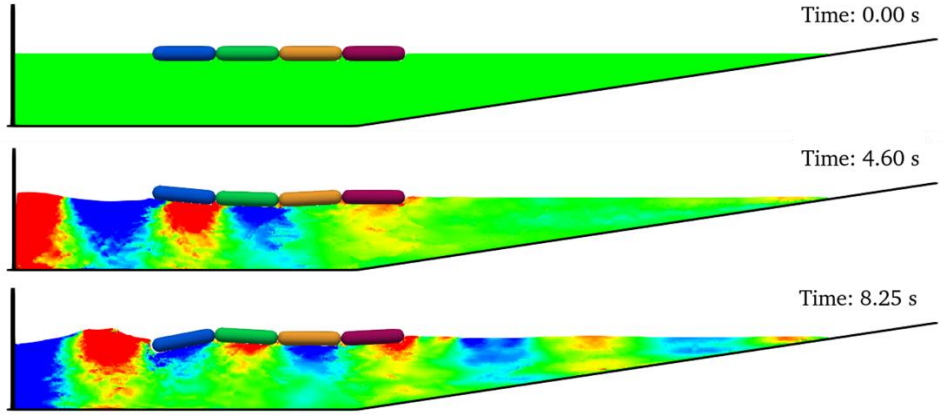
3_FLEXIBLEGATE

- 2-D flexible gate is emulated by linking rigid blocks with a series of hinges, with rotational rigidity and damped behavior. Video



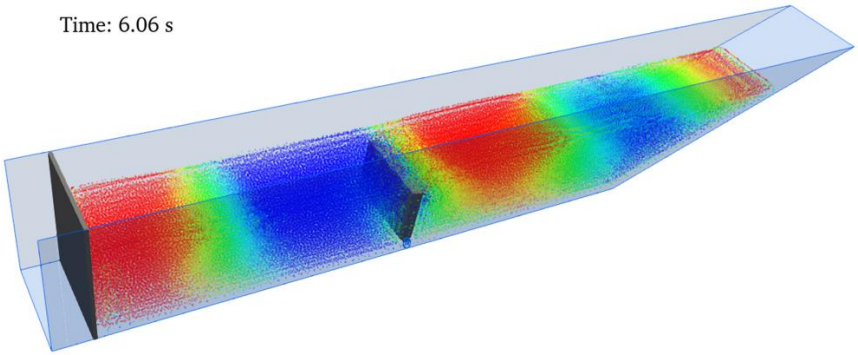
04_PELAMIS

- Several bodies connected with a spherical link (hinge) combined with a point line link. Video



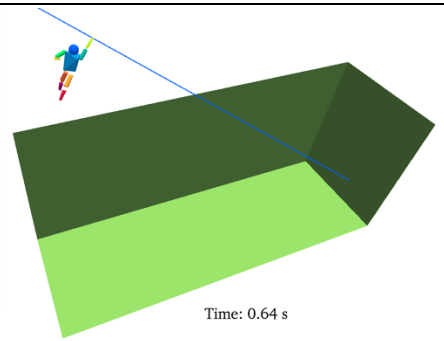
05_OWSC

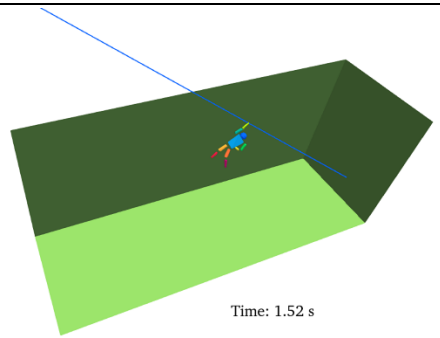
- A mechanism subjected to waves is hinged to the tank bottom. Video



06_ZipLine

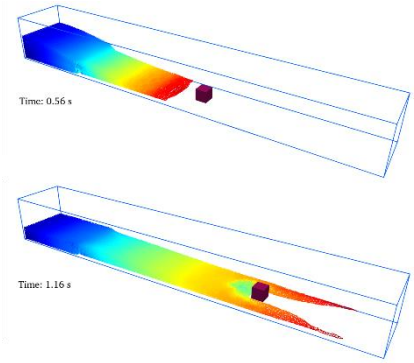
- A simplified ragdoll is defined: with one hand restricted by a point line link and with full self-collisions. Video

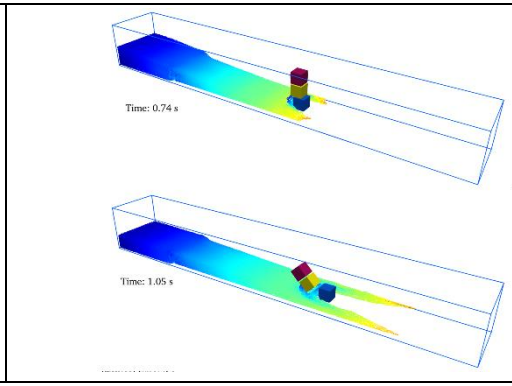




07_DambreakCubes

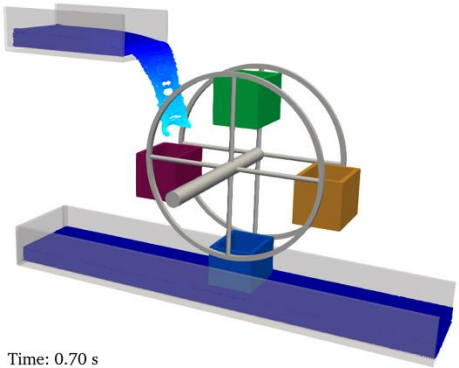
- 3-D dam break impacts with cubes (1 & 3) that interact between themselves and with the fixed boundary. Video1 & Video2

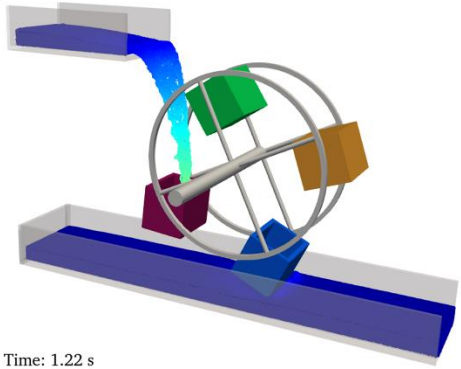




08_WaterMill

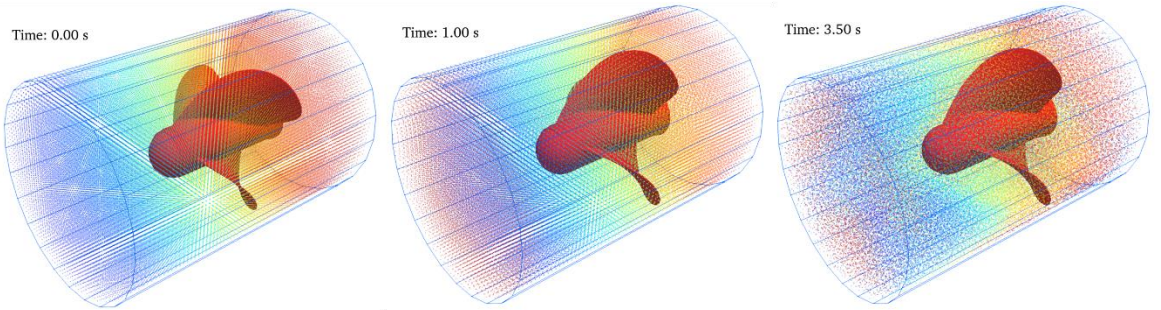
- Complex mechanism is designed with multiple links enabling relative motions, driven by the fluid or another object. Video





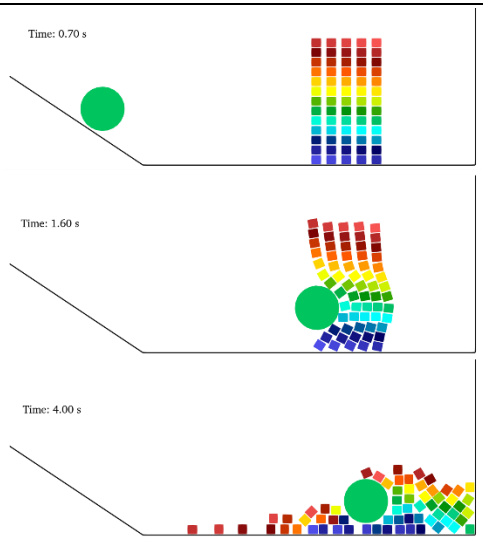
09_TURBINE

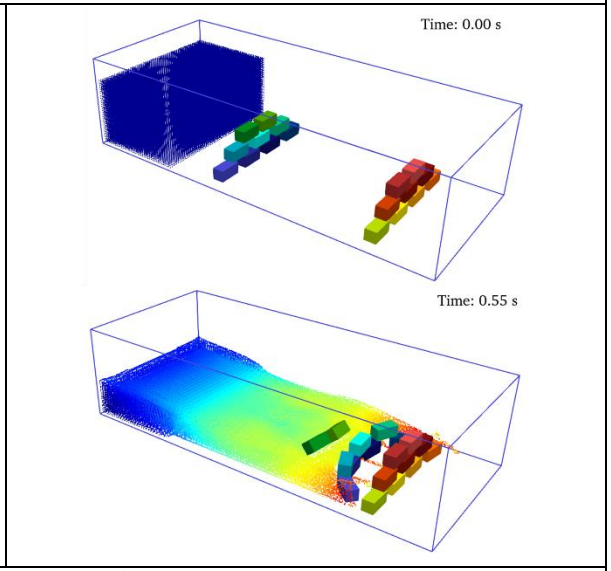
- A closed fluid circuit driven by gravity provides the necessary momentum to a hinged turbine to rotate. Video



10_REPLACINGDEM

- Same cases shown in *examples/main/14_DEM* but now using Chrono to solve collisions. Video1 & Video2





11_POINTABSORBER

- 2-D floating box under the action of regular waves is restricted to only-heave motion using Chrono (point line link) and using direct restrictions. Video