Fluid-Objects Interaction

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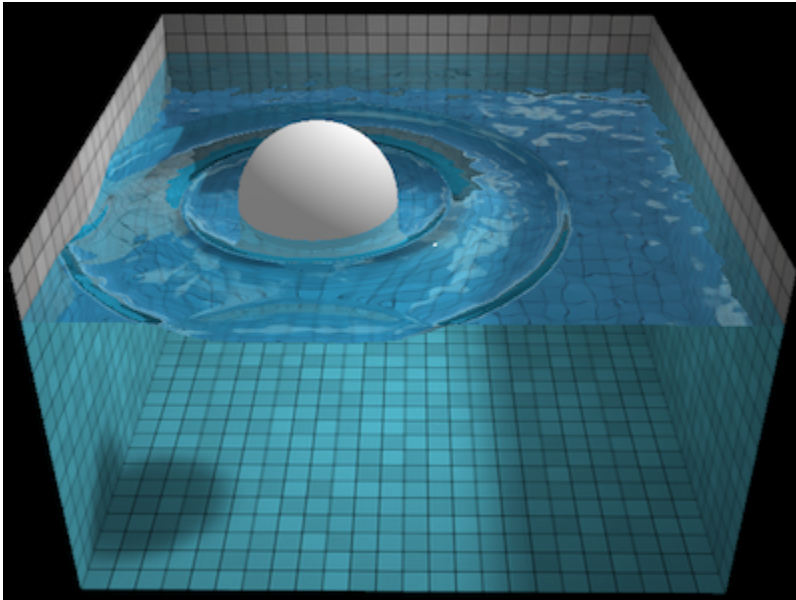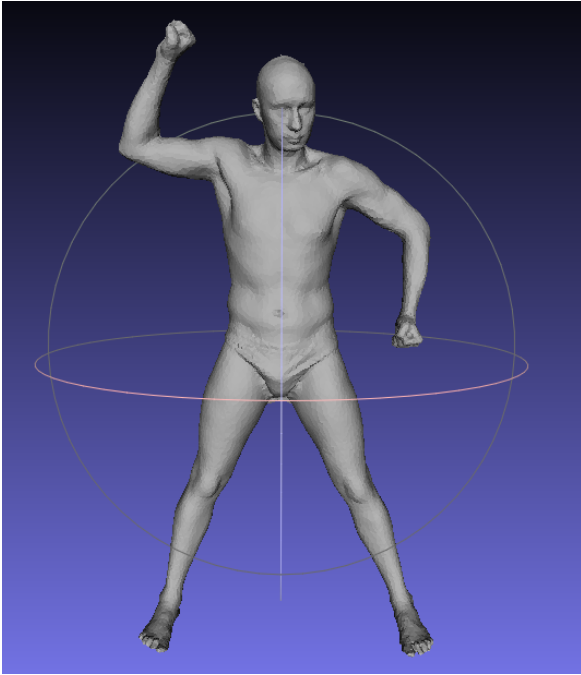
Some Inspiration

Ice Bucket Challenge

Fluid Interaction with Static Objects

- Fluid poured over a mesh
- Water/Sand
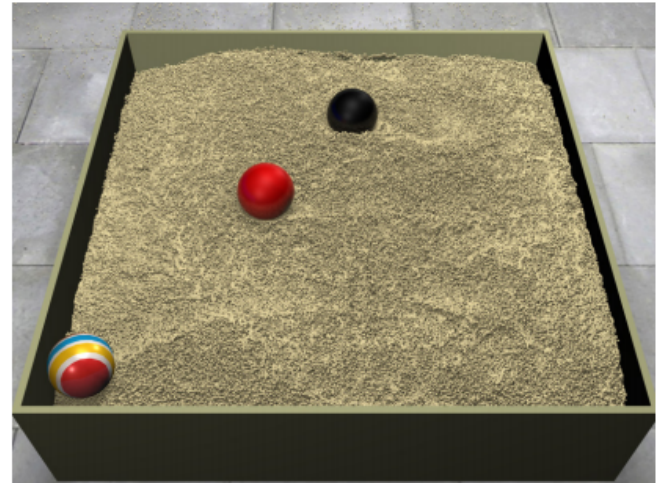- Floating Objects (Spheres/Ice Cubes)

Ingredients

Rigid Body Collision Handling

SPH (Lagrangian method)

A bit more details

- Standard SPH [Muller03]
- Rigid Mesh Collision Handling (over a grid)
  - Scape Mesh [Anguelov et al. 2005]
  - Over 12,500 vertices
- Sand [Ihmsen et al.2012]

Timeline

Date	Goal	Milestone
05.11		Start of project
12.11	Design and initialize framework (mesh loading, boxing, 3D grid)	
19.11	Water simulation in a bounding box	
26.11	Water pouring over mesh with just particle rendering	Presentation
03.12	Add sand simulation	
10.12	Add floating objects (ice cubes, spheres)	
17.12	Rendering and final presentation	Final presentation

On Time!

DEMO