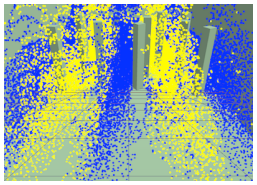
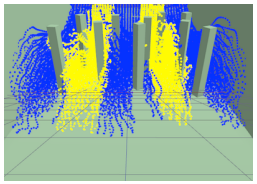
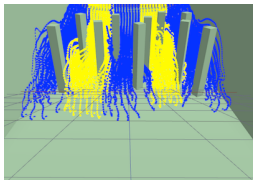
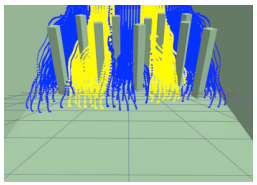
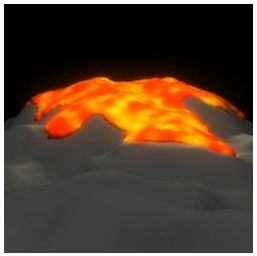
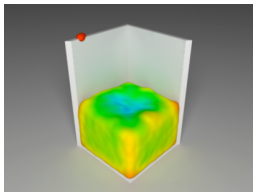
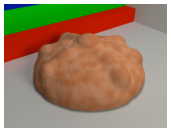
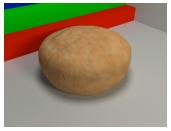
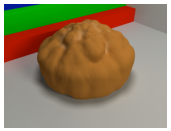
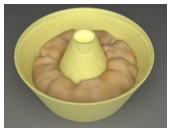
Animation information

Test animations

Name	Image	Description	Particle count	Simulation time	System	Animation time
Velocity tuner test 1		Velocity tuner ε = 0.00.	28,072	6h 30m	A	14s
Velocity tuner test 2		Velocity tuner ε = 0.25.	28,072	4h 10m	A	14s
Velocity tuner test 3		Velocity tuner ε = 0.50.	28,072	4h 05m	A	14s
Velocity tuner test 4		Velocity tuner ε = 0.75.	28,072	4h 22m	A	14s

Name	Image	Description	Particle count	Simulation time	System	Animation time
Volcano		Temperature dependent velocity tuner with range $0.1 \leq \varepsilon \leq 0.50$.	20,856	9h 33m	B	59s
Fluid in container		Fluid-Solid phase change based on temperature dependent viscosity, elasticity and velocity tuner.	19,958	5h 25m	B	33s

Baking animations

Name	Image	Description	Dough particle count	Bubble particle count	Total particle count	Simulation time	System	Animation time
Bread of the dead		Dough maintains its shape during the baking process.	12,880	8,890	21,770	5h 59m	B	48s
Bread roll 1		Uniform distribution of bubble particles.	11,586	8,224	19,810	3h 56m	B	39s
Bread roll 2		Centred distribution of bubble particles.	11,953	7,857	19,810	3h 47m	B	39s
Failed angel food cake		Dough increases in volume. After solidification part of the volume is lost.	12,370	8,575	20,945	4h 39m	B	32s

Note: The initial “oscillations” in the beginning of the baking animations occur because the particles are let to fall under gravity, and what we see is the reaction of the dough after it falls on a solid.

System A:
2x Dual-Core AMD Opteron @ 2.21 GHz (4 cores in total), 4GB RAM
System B:
2x Intel Core i7 CPU 920 @ 2.67GHz (8 cores in total), 6GB RAM