

```

1  simulation:
2      case:
3          workspace:
4              constants:
5                  - gravity: 0|-9.81
6                  - dist: 0.1
7                  - c1: 2.1
8                  - dx: dist*3
9              variables:
10                 - dt: 0.001
11                 - T: 0
12             particle_system:
13                 domain:
14                     cell_size: c1|c1/2
15                     minimum: -100|-20
16                     maximum: 100|10
17                     boundary: periodic|symmetric
18             grid:
19                 gid: 0
20                 gpos: -0.5|-1
21                 gsize: 2|1
22                 goffset: 0|0
23                 gip_dist: dx|dx
24             grid:
25                 gid: 1
26                 file: nodes.txt
27             fields:
28                 - f1: 0
29                 - f2: 1000|500
30                 - velocity: 0|0
31             equations:
32                 - time: T=T+dt
33                 - equation1: f1=interaction1(r,c1,delta)^2+sin(f2)
34                 - condition: eq(gid,1)
35                 - equation2: f2=f1*velocity-interaction2(r,dx,velocity)
36             parameter_space:
37                 simulated_time: 50
38                 print_interval: 0.1
39                 confirm_on_exit: 0
40                 output_format: BINARY
41                 file_start: 0

```

Constants

Variables

Particle system

Fields

UDE's

Domain

Particles on a grid

Particles from a file

Simulation parameters