

```

1  <?xml version="1.0" encoding="UTF-8"?>
2  <simulation>
3      <case>
4          <workspace>
5              <constants>
6                  <C1 value="-1.1"/>
7                  <C2 value="pi"/>
8                  <C3 value="7.3e2"/>
9              </constants>
10             <variables>
11                 <dt value="0.002"/>
12                 <T value="0"/>
13             </variables>
14             <particle_system>
15                 <domain>
16                     <cell_size value="0.1"/>
17                     <minimum value="-10|-10"/>
18                     <maximum value="10|10"/>
19                     <boundary value="periodic|symmetric"/>
20                 </domain>
21                 <grid>
22                     <gid value="0"/>
23                     <gpos value="-0.2|-0.3"/>
24                     <gsize value="0.4|0.6"/>
25                     <goffset value="0|0"/>
26                     <gip_dist value="0.01|0.01"/>
27                 </grid>
28                 <grid>
29                     <gid value="1"/>
30                     <file value="nodes.txt"/>
31                 </grid>
32             </particle_system>
33             <fields>
34                 <F1 value="C2"/>
35                 <F2 value="C1+C3"/>
36                 <F3 value="if(gt(magnitude(r),0),F1,F2)"/>
37             </fields>
38         </workspace>
39         <equations>
40             <eq1 value="T=T+dt"/>
41             <eq2 value="F1=C1+F2" condition="eq(gid,0)"/>
42             <eq3 value="dt=C3-C2" condition="gt(F1,C3)"/>
43         </equations>
44     </case>
45     <parameter_space>
46         <simulated_time value="5"/>
47         <print_interval value="0.01"/>
48         <confirm_on_exit value="0"/>
49         <output_format value="ASCII"/>
50         <file_start value="0"/>
51     </parameter_space>
52 </simulation>

```

Constants {

Variables {

Particle system {

Domain {

Particles on a grid {

Particles from a file {

Fields {

UDE's {

Simulation parameters {