#define Res 10

#define MaxTrail 1500

#define MaxParticles 150

#define MaxTargets 16

float dirLength;

float cellsColor[Res\*Res];

double timeStep = 0.3;

double targetStrength = 0.1;

double gravityStrength = 0.0;

double spinStrength = 0.0;

double dragStrength = 0.1;

double collisonStrength = 0.2;

double collisonRadius = 4;

double magneticStrength = 0.1;

double chemicalStrength = 0;

double chemicalRadius = 5;

for (int i = 0; i < MaxParticles; i++)

{

vel[i] = vec(0, 0, 0);

pos[i] = vec(ofRandom(-15, 15), ofRandom(-15, 15), 0);

}

for (int i = 0; i < MaxTargets; i++)

{

target[0] = vec(-75, 0, 0);

target[1] = vec(-75, -75, 0);

target[2] = vec(0, -75, 0);

target[3] = vec(+75, -75, 0);

target[4] = vec(+75, 0, 0);

target[5] = vec(+75, +75, 0);

target[6] = vec(0, +75, 0);

target[7] = vec(-75, +75, 0);

target[8] = vec(-50, +50, 0);

target[9] = vec(-50, -50, 0);

target[10] = vec(+50, -50, 0);

target[11] = vec(+50, +50, 0);

target[12] = vec(0, +25, 0);

target[13] = vec(-25, 0, 0);

target[14] = vec(0, -25, 0);

target[15] = vec(+25, 0, 0);

}

for (int i = 0; i < MaxTargets; i++)

{

charges[0] = +1;

charges[1] = -1;

charges[2] = +1;

charges[3] = -1;

charges[4] = +1;

charges[5] = -1;

charges[6] = +1;

charges[7] = -1;

charges[8] = +1;

charges[9] = +1;

charges[10] = +1;

charges[11] = +1;

charges[12] = -1;

charges[13] = -1;

charges[14] = -1;

charges[15] = -1;

}