#define Res 10

#define MaxTrail 500

#define MaxParticles 150

#define MaxTargets 8

float dirLength;

float cellsColor[Res\*Res];

double timeStep = 0.3;

double targetStrength = 0.001;

double gravityStrength = 0.0;

double spinStrength = 0.0;

double dragStrength = 0.2;

double collisonStrength = 0.1;

double collisonRadius = 8;

double magneticStrength = 2;

double chemicalStrength = 0;

double chemicalRadius = 0;

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(-100, 0, 0);

target[1] = vec(-50, -50, 0);

target[2] = vec(0, -100, 0);

target[3] = vec(+50, -50, 0);

target[4] = vec(+100, 0, 0);

target[5] = vec(+50, +50, 0);

target[6] = vec(0, +100, 0);

target[7] = vec(-50, +50, 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;