The mean enounter time simulation
End to End vector Simulation in the Rouse Model
Random walk simulation
Perspective

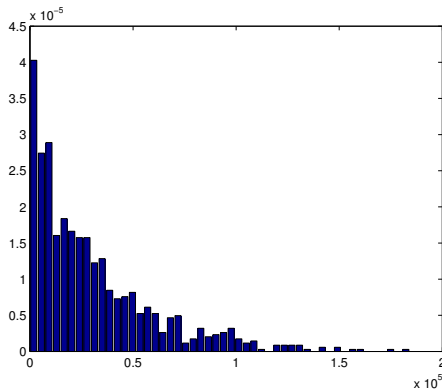# Polymer Chain Dynamics Simulation

Chenyu ZHA

May 12, 2015

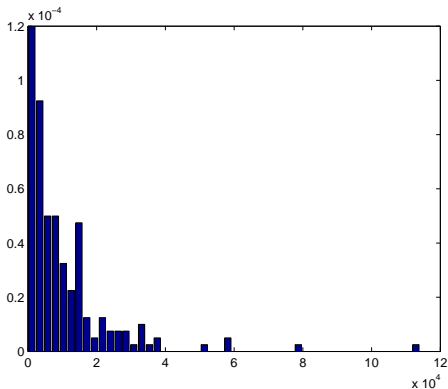The mean enounter time simulation
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Sommaire

Polymer Chain Dynamics

The mean enounter time simulation
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dimension = 3;
numParticles =
1000; dt = 0.01;
diffusionConst = 1;
numSteps = Inf;
numSimulations =
1000;
frictionCoefficient
= 1;
connectedBeads =
[]; fixedBeads = [];
metBeedNum = [1
16 32]; lengthBead
= 1;
encounterDistance
= b./5;

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The mean enounter time simulation
End to End vector Simulation in the Rouse Model
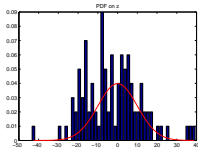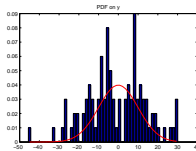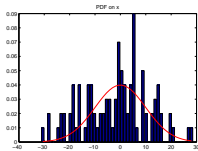Random walk simulation
Perspective

dimension = 3;
numParticles =
1000; dt = 0.01;
diffusionConst = 1;
numSteps = Inf;
numSimulations =
200;
frictionCoefficient
= 1;
connectedBeads =
[]; fixedBeads = [];
metBeedNum = [1
16 32]; lengthBead
= 1;
encounterDistance
= b./4;

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The mean enounter time simulation
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dimension=3
numParticles=100
dt=0.1
numSteps=150
diffusionConst=1
paths
endToEndDist
simulation=100

The mean enounter time simulation
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The mean enounter time simulation
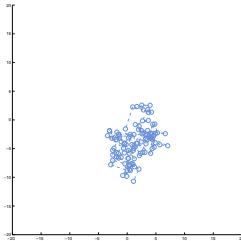End to End vector Simulation in the Rouse Model
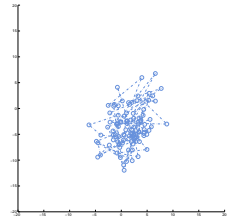**Random walk simulation**
Perspective

Figure: initial position

Figure: final position

parameters:dimension=3;numParticles=100;dt=0.5;
numSteps=100;diffusionConst=0.6

Polymer Chain Dynamics

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The mean enounter time simulation
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- Simulation on general domains
- Simulate telometre clustering(sphere)
- Build 'Results' module