1-D ring (N=10000):

- starting node: 5000

- dimension: 1.000

- constant of dimension plot: 0.6931

A close up of a map

Description automatically generated

- perturbed node: 5000

- eigendimension: 1.987

- eigenconstant: -0.7826

omega: [0.75; 0.6750; 0.6075; 0.4921; 0.4429; 0.3986; 0.3587; 0.3229; 0.2906; 0.2615; 0.2354; 0.2118; 0.1906; 0.1716; 0.1544; 0.1390; 0.1251; 0.1126; 0.1013; 0.0912]

A close up of a map

Description automatically generated

2-D Lattice (N=10000)

starting node = 1

dim : 1.9426

A close up of a map

Description automatically generated

node perturbed = 5050

omega values = 0.05 : 0.5

dim from eig : 0.2971 (slope of 1.1744)

A screenshot of a cell phone

Description automatically generated

Regular Tree, m = 3, split = 2, (N = 10,000)

starting node = 1

dim : 1.5899

A close up of a map

Description automatically generated

node perturbed = 1

omega values = 1/4 : 3/4

dim from eig : 1.1278 (slope of 2.293)

A close up of a map

Description automatically generated

node perturbed = 1

omega values = 0.05 : 0.2

dim from eig : 1.4 (slope of 3.344)

A close up of a map

Description automatically generated

Graph: Regular tree (N=10000, m=4, split = 2)

- starting node: 1

- dimension: 1.4896

- constant of dimension plot: -0.7826

A close up of a map

Description automatically generated

- perturbed node: 1

- eigendimension: 2.3678

- eigenconstant: -0.3489

omega: [0.75; 0.6750; 0.6075; 0.4921; 0.4429; 0.3986; 0.3587; 0.3229; 0.2906; 0.2615; 0.2354; 0.2118; 0.1906; 0.1716; 0.1544; 0.1390; 0.1251; 0.1126; 0.1013; 0.0912]

A close up of a map

Description automatically generated