

```

17 with model:
18
19     groupA = nengo.Ensemble(n_neurons = Nneurons, dimensions=1,
intercepts=np.ones(Nneurons)*-2)
20     #bias=np.ones((Nneurons))*1, gain=np.ones(Nneurons)*2)
21     groupB = nengo.Ensemble(n_neurons = Nneurons, dimensions=1)
22     groupC = nengo.Ensemble(n_neurons = 1, dimensions=1)
23     connAC = nengo.Connection( groupA.neurons, groupC.neurons,
24                               synapse=None,
25                               transform=np.ones((
26                                   groupC.n_neurons,
27                                   groupA.n_neurons)))
28     connBC = nengo.Connection( groupB.neurons, groupC.neurons,
29                               synapse=None,
30                               transform=np.ones((
31                                   groupC.n_neurons,
32                                   groupB.n_neurons)))
33
34     pA      = nengo.Probe(groupA)
35     pB      = nengo.Probe(groupB)
36     pC      = nengo.Probe(groupC)
37     wAC     = nengo.Probe(connAC, "weights")
38     wBC     = nengo.Probe(connBC, "weights")
39
40     sim = nengo.Simulator(model)
41     sim.run(5)
42
43     import matplotlib.pyplot as plt
44
45     ## Plot results
46     plt.figure()
47     nr = 3
48     nc = 2
49     fi = 1
50
51     plt.subplot(nr,nc,fi)
52     fi=fi+1
53     plt.plot(sim.data[pA][0:100], label='A')
54     #plt.plot(sim.trange(), sim.data[pA], label='A')
55     plt.ylabel("A - firing rate")
56     plt.xlabel('t(s)')
57
58     plt.subplot(nr,nc,fi)
59     fi=fi+1
60     plt.plot(sim.data[pB][0:100], label='B')
61     #plt.plot(sim.trange(), sim.data[pB], label='B')

```

```
plt.show()
```

```
# Learnings
```

```
# Gotta connect to Ensemble.neurons, else the cluster is reduced to size
```

```

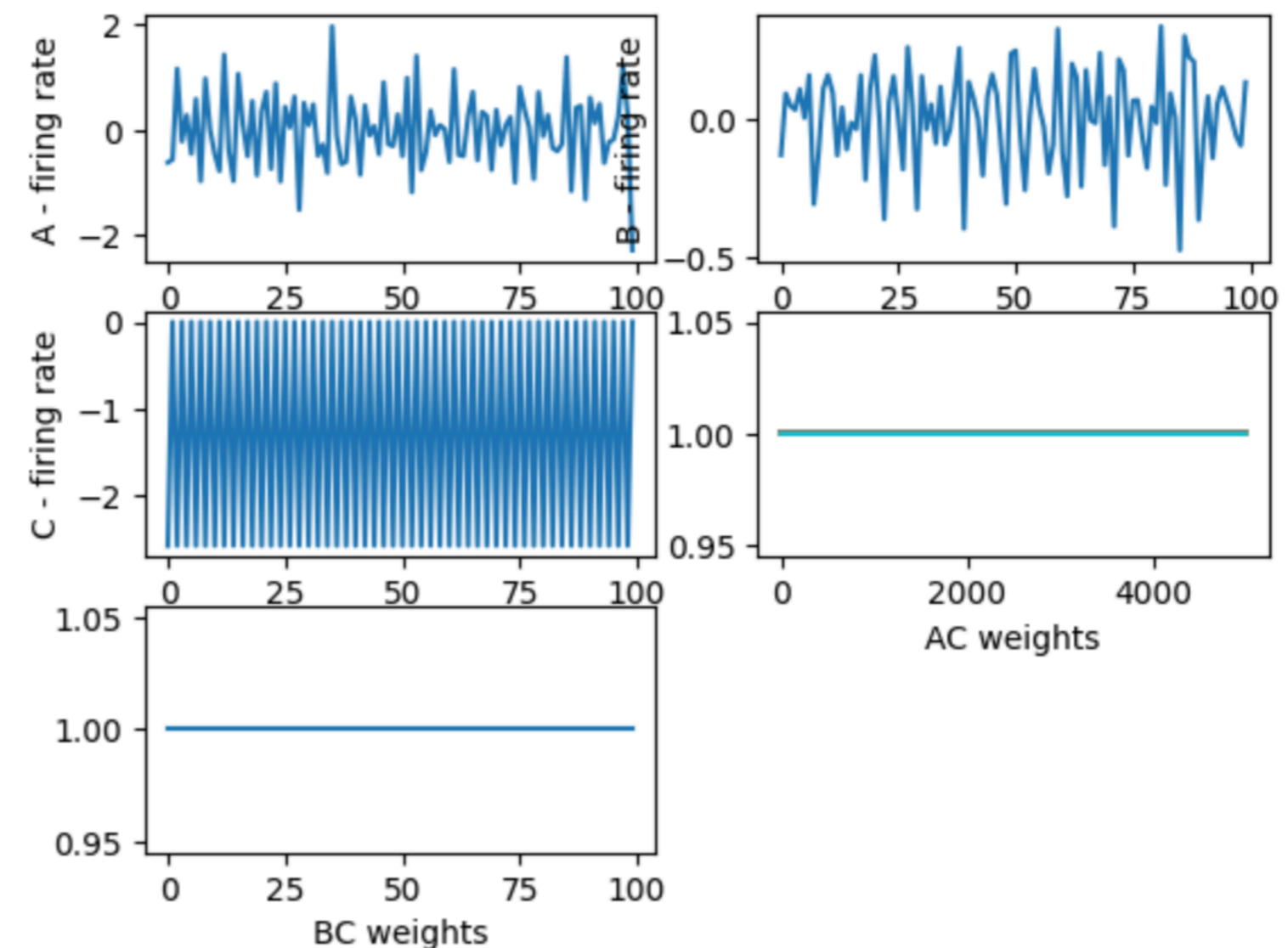
/Library/Frameworks/Python.framework/Versions/3.10/lib/python3.10/site-p
ackages/nengo/builder/optimizer.py:649: UserWarning: Skipping some optim
ization steps because SciPy is not installed. Installing SciPy may resul
t in faster simulations.

```

```
warnings.warn(
```

```
Build finished in 0:00:01.
```

```
Simulation finished in 0:00:02.
```



```
[ ]:
```