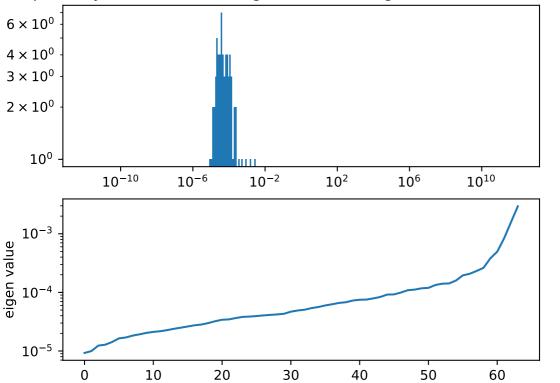
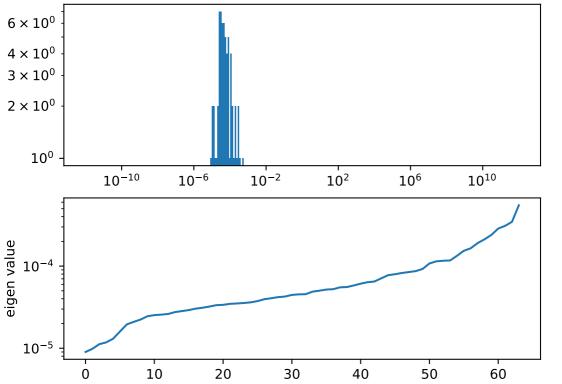
ep: 40 conv1 maxeig: 1.3e+00 mineig: 4.2e-07 con: 3.1e+06  $4 \times 10^{0}$  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 10<sup>10</sup> 10-10  $10^{-6}$ 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-1}$ eigen value 10<sup>-3</sup> 10<sup>-5</sup> 50 60 10 20 30 40

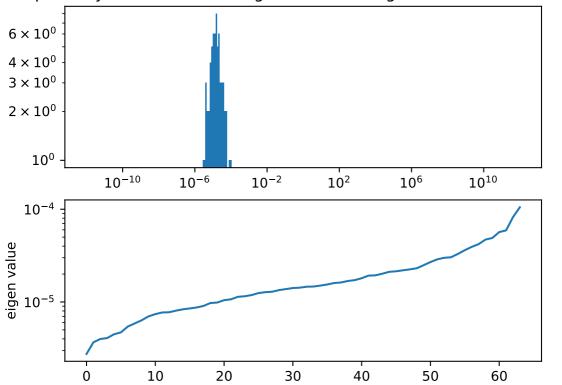
ep: 40 layer1.0.conv1 maxeig: 2.9e-03 mineig: 9.3e-06 con: 3.2e+02

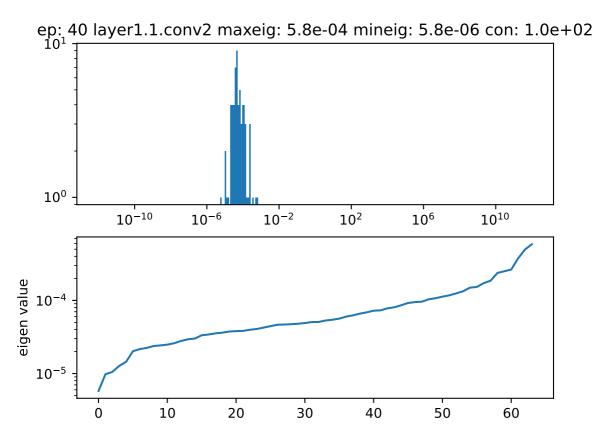


ep: 40 layer1.0.conv2 maxeig: 5.5e-04 mineig: 9.0e-06 con: 6.1e+01

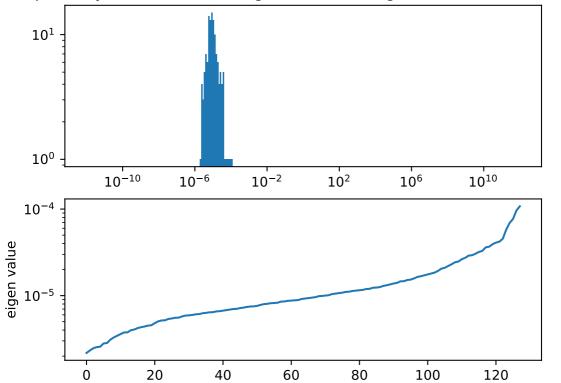


ep: 40 layer1.1.conv1 maxeig: 1.0e-04 mineig: 2.8e-06 con: 3.8e+01

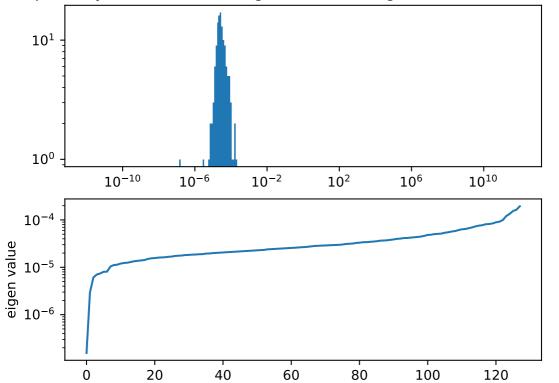




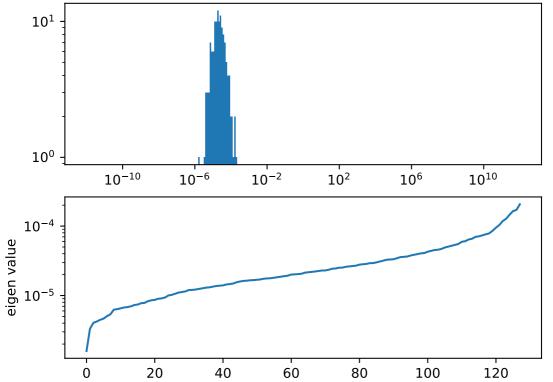
ep: 40 layer2.0.conv1 maxeig: 1.1e-04 mineig: 2.2e-06 con: 5.0e+01



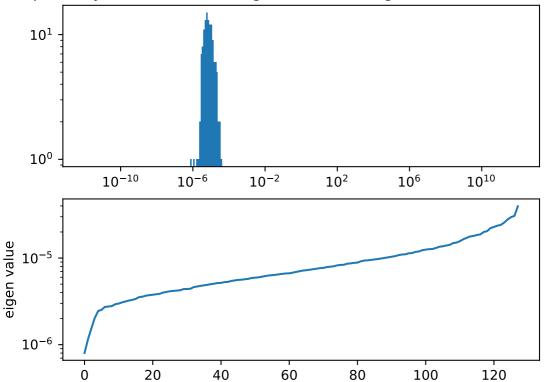
ep: 40 layer2.0.conv2 maxeig: 1.9e-04 mineig: 1.6e-07 con: 1.2e+03



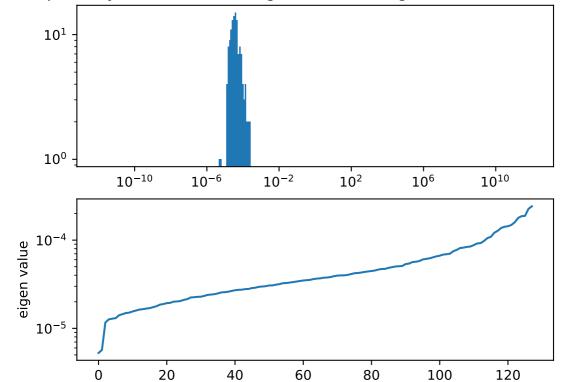
ep: 40 layer2.0.shortcut.0 maxeig: 2.1e-04 mineig: 1.6e-06 con: 1.3e+02

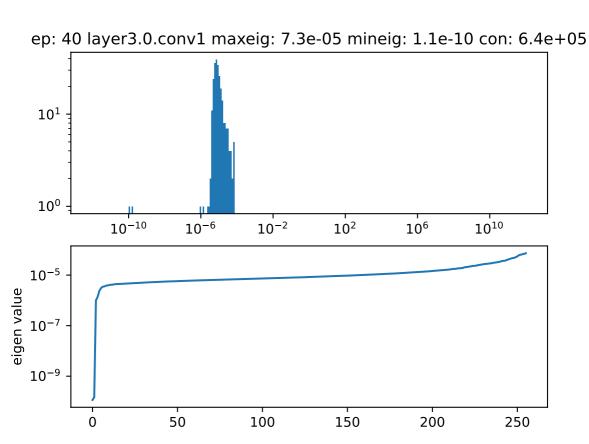


ep: 40 layer2.1.conv1 maxeig: 4.0e-05 mineig: 8.0e-07 con: 4.9e+01

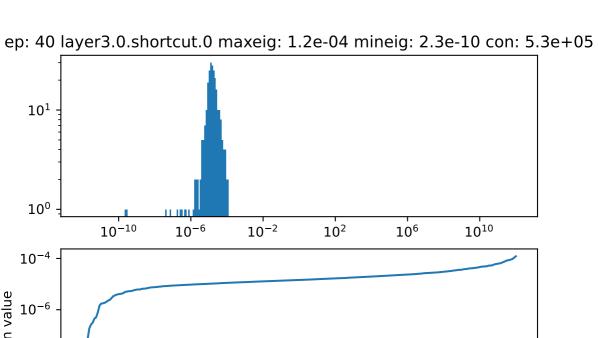


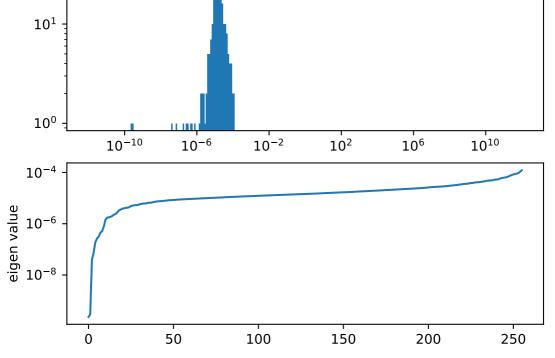
ep: 40 layer2.1.conv2 maxeig: 2.4e-04 mineig: 5.3e-06 con: 4.6e+01

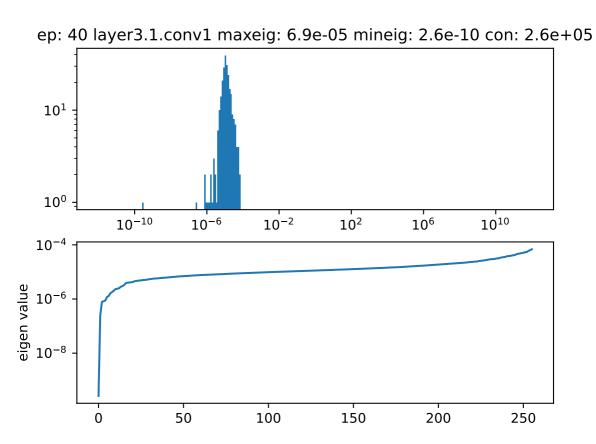




ep: 40 layer3.0.conv2 maxeig: 1.9e-04 mineig: 5.1e-10 con: 3.8e+05 10<sup>1</sup> 10<sup>0</sup> 1010  $10^{-10}$ 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-6}$  $10^{-4}$ eigen value 10<sub>-8</sub> 250 50 100 150 200







ep: 40 layer3.1.conv2 maxeig: 3.2e-04 mineig: 1.5e-06 con: 2.2e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10-10 10-6  $10^{-2}$ 10<sup>6</sup> eigen value 10<sup>-4</sup> 250 50 100 150 200

ep: 40 layer4.0.conv1 maxeig: 1.8e-04 mineig: 6.1e-07 con: 2.9e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10<sup>-10</sup> 10-6 10-2 10<sup>6</sup>  $10^{-4}$ eigen value 10<sup>-5</sup>  $10^{-6}$ 100 500 200 300 400

ep: 40 layer4.0.conv2 maxeig: 4.6e-04 mineig: 1.6e-07 con: 2.9e+03  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup> 10-2 10<sup>6</sup>  $10^{-6}$  $10^{-4}$ eigen value 10<sup>-5</sup>  $10^{-6}$ 

200

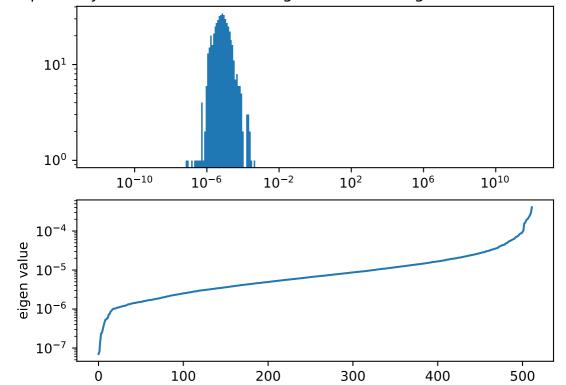
300

400

500

100

ep: 40 layer4.0.shortcut.0 maxeig: 4.1e-04 mineig: 7.1e-08 con: 5.8e+03



ep: 40 layer4.1.conv1 maxeig: 1.6e-04 mineig: 1.2e-10 con: 1.3e+06 10<sup>1</sup> 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup> 10-6 10-2 10<sup>6</sup> 10<sup>-5</sup> eigen value  $10^{-7}$  $10^{-9}$ 

200

300

400

500

100

ep: 40 layer4.1.conv2 maxeig: 1.2e-03 mineig: 7.3e-08 con: 1.6e+04  $10^{1}$ 10<sup>0</sup> 10 10 10-10  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{-6}$ 10<sup>-3</sup> e iden 10<sup>-4</sup> 10<sup>-5</sup> 10<sup>-6</sup>  $10^{-4}$  $10^{-7}$ 100 500 200 300 400

