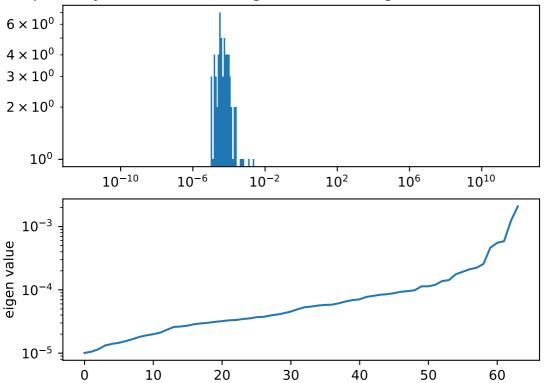
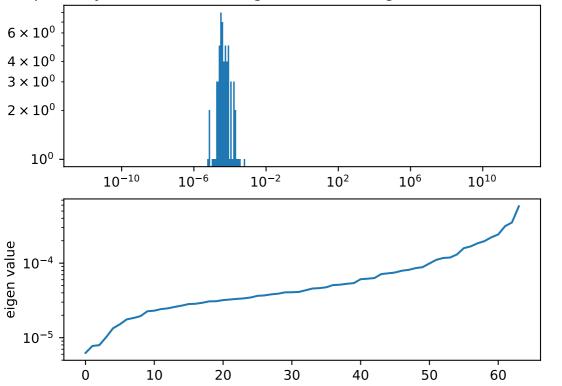


ep: 31 layer1.0.conv1 maxeig: 2.1e-03 mineig: 1.0e-05 con: 2.1e+02



ep: 31 layer1.0.conv2 maxeig: 5.8e-04 mineig: 6.2e-06 con: 9.3e+01



ep: 31 layer1.1.conv1 maxeig: 1.0e-04 mineig: 2.8e-06 con: 3.7e+01  $6 \times 10^{0}$  $4 \times 10^{0}$  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 10 10 10-10  $10^{-6}$ 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-4}$ eigen value 10<sup>-2</sup>

30

40

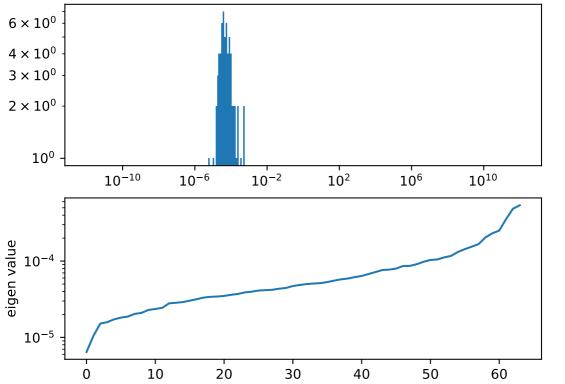
10

20

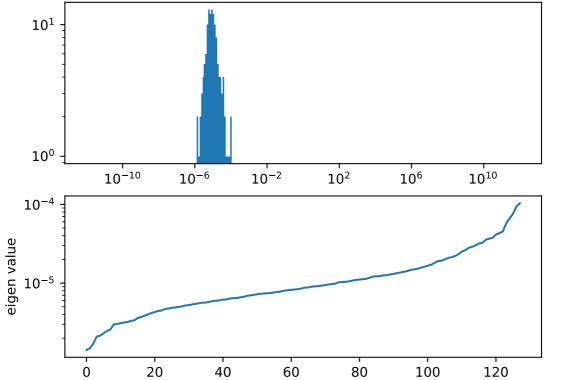
50

60

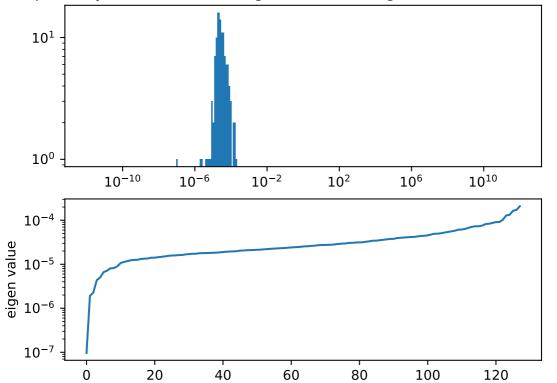
ep: 31 layer1.1.conv2 maxeig: 5.4e-04 mineig: 6.4e-06 con: 8.4e+01



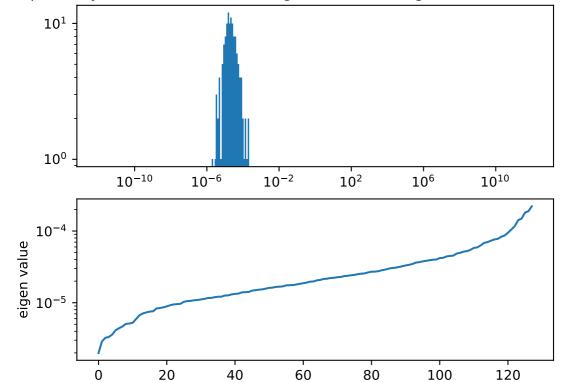
ep: 31 layer2.0.conv1 maxeig: 1.0e-04 mineig: 1.4e-06 con: 7.3e+01



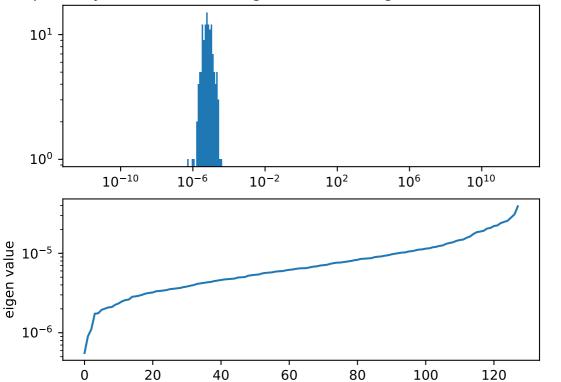
ep: 31 layer2.0.conv2 maxeig: 2.1e-04 mineig: 9.7e-08 con: 2.2e+03



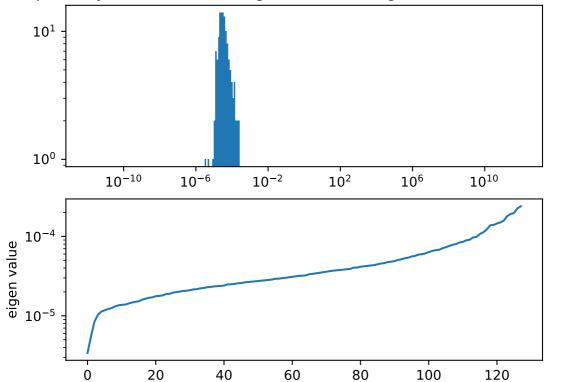
ep: 31 layer2.0.shortcut.0 maxeig: 2.2e-04 mineig: 2.0e-06 con: 1.1e+02

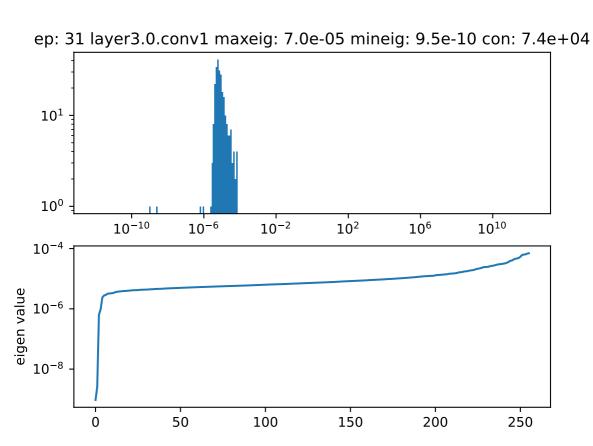


ep: 31 layer2.1.conv1 maxeig: 3.9e-05 mineig: 5.6e-07 con: 7.0e+01



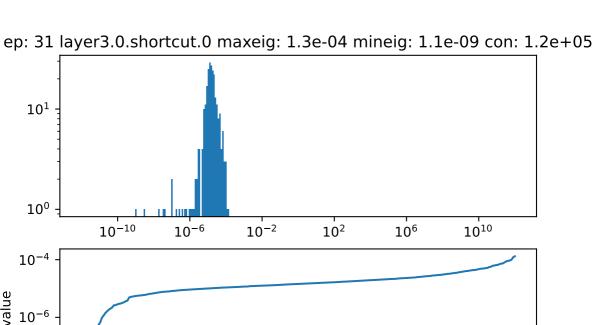
ep: 31 layer2.1.conv2 maxeig: 2.4e-04 mineig: 3.4e-06 con: 7.0e+01

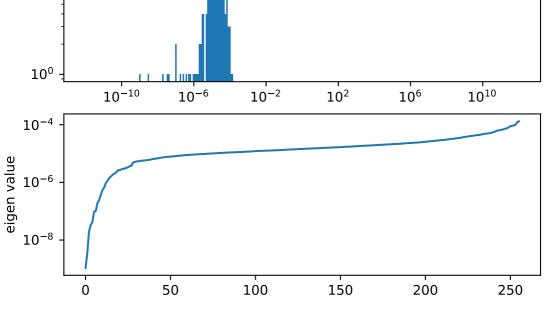




ep: 31 layer3.0.conv2 maxeig: 2.0e-04 mineig: 9.8e-10 con: 2.1e+05  $10^{1}$ 10<sup>0</sup> 1010 10-10  $10^{-6}$ 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-4}$  $10^{-6}$  $10^{-8}$ 250 50 100 150 200

eigen value





ep: 31 layer3.1.conv1 maxeig: 6.6e-05 mineig: 3.0e-09 con: 2.2e+04  $10^{1}$ 10<sup>0</sup> 1010 10-10 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-6}$  $10^{-4}$  $10^{-5}$ eigen value  $10^{-6}$  $10^{-7}$ 10-8 250 50 100 150 200

ep: 31 layer3.1.conv2 maxeig: 3.1e-04 mineig: 1.1e-06 con: 2.9e+02 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> eigen value 10<sup>-5</sup>  $10^{-6}$ 250 50 100 150 200

ep: 31 layer4.0.conv1 maxeig: 1.8e-04 mineig: 6.0e-07 con: 3.1e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10<sup>-10</sup> 10-2 10<sup>6</sup>  $10^{-6}$  $10^{-4}$ eigen value 10<sup>-5</sup>  $10^{-6}$ 100 500 200 300 400

ep: 31 layer4.0.conv2 maxeig: 4.4e-04 mineig: 3.2e-07 con: 1.4e+03 10<sup>1</sup> 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup>  $10^{-10}$  $10^{-6}$ 10-2 10<sup>6</sup> eigen value 1'  $10^{-6}$ 

200

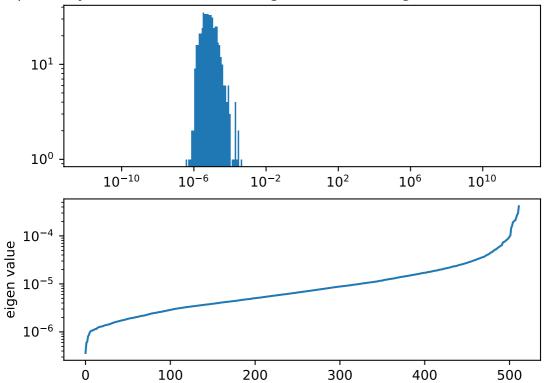
300

400

500

100

ep: 31 layer4.0.shortcut.0 maxeig: 4.1e-04 mineig: 3.6e-07 con: 1.1e+03



ep: 31 layer4.1.conv1 maxeig: 1.3e-04 mineig: 9.8e-10 con: 1.3e+05 10<sup>1</sup> 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  $10^{-6}$ 10-8

200

300

400

500

100

ep: 31 layer4.1.conv2 maxeig: 1.1e-03 mineig: 6.9e-08 con: 1.7e+04 10<sup>1</sup> 10<sup>0</sup> 10 10 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{-3}$  $10^{-4}$  $10^{-7}$ 100 500 200 300 400

