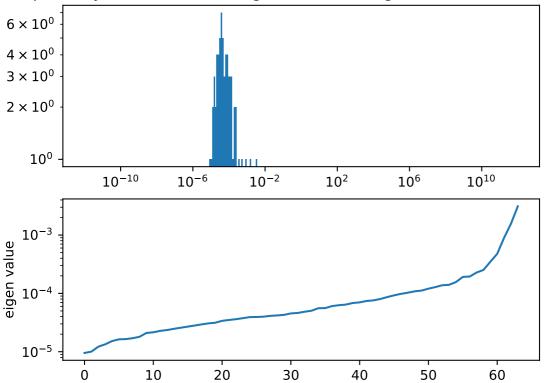
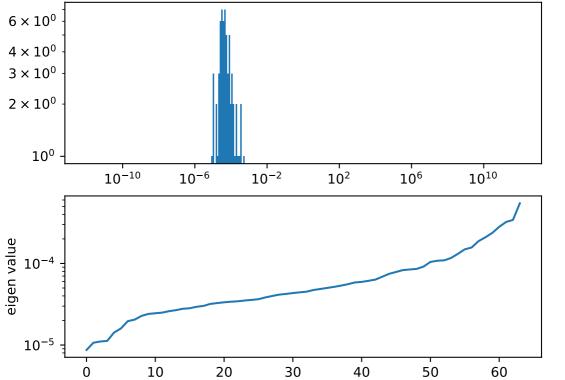
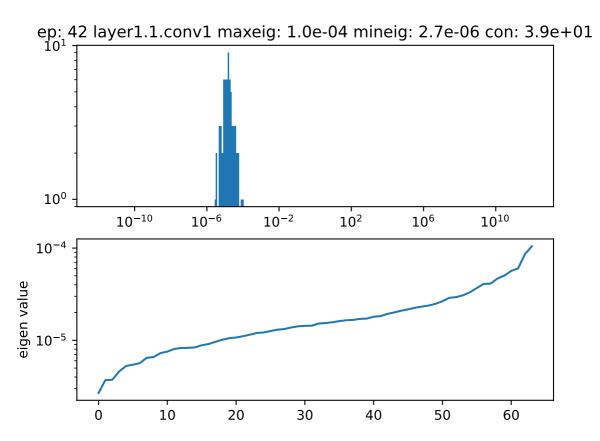
ep: 42 conv1 maxeig: 1.4e+00 mineig: 1.9e-07 con: 7.2e+06  $4 \times 10^{0}$  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 10 10 10-10  $10^{-6}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{-2}$  $10^{0}$ eigen value  $10^{-2}$  $10^{-4}$  $10^{-6}$ 10 30 50 60 20 40

ep: 42 layer1.0.conv1 maxeig: 3.1e-03 mineig: 9.5e-06 con: 3.3e+02

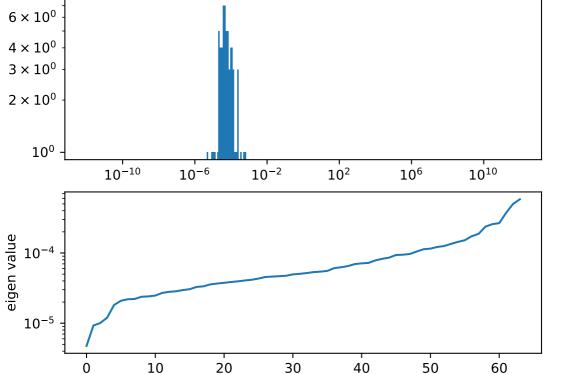


ep: 42 layer1.0.conv2 maxeig: 5.5e-04 mineig: 8.7e-06 con: 6.3e+01

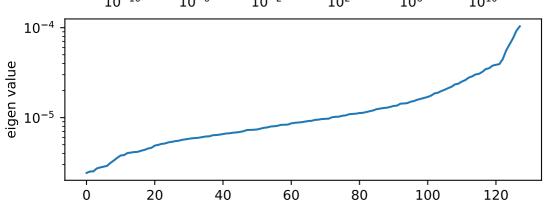




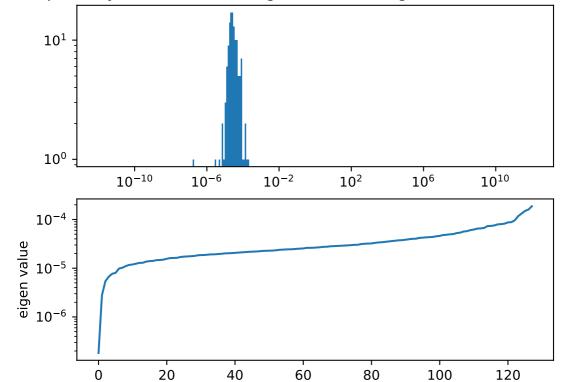
ep: 42 layer1.1.conv2 maxeig: 5.8e-04 mineig: 4.7e-06 con: 1.2e+02



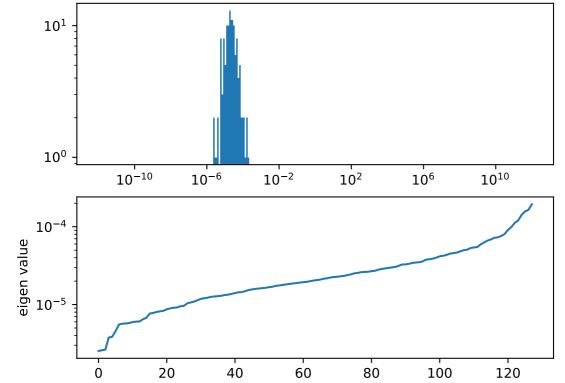
ep: 42 layer2.0.conv1 maxeig: 1.0e-04 mineig: 2.4e-06 con: 4.3e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10-10 10-2 10<sup>6</sup>  $10^{-6}$  $10^{-4}$ 



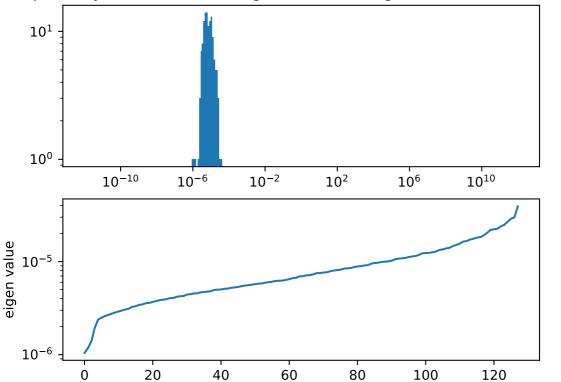
ep: 42 layer2.0.conv2 maxeig: 1.9e-04 mineig: 1.8e-07 con: 1.0e+03



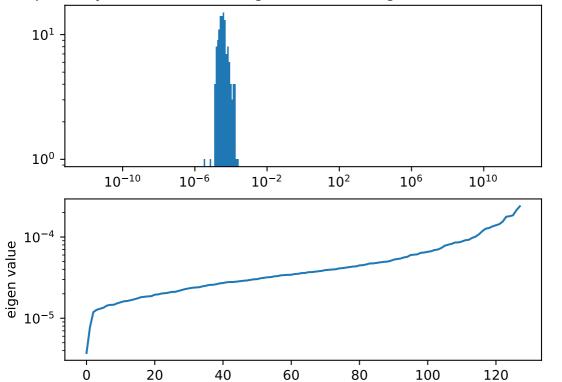
ep: 42 layer2.0.shortcut.0 maxeig: 1.9e-04 mineig: 2.5e-06 con: 7.7e+01



ep: 42 layer2.1.conv1 maxeig: 3.9e-05 mineig: 1.0e-06 con: 3.8e+01



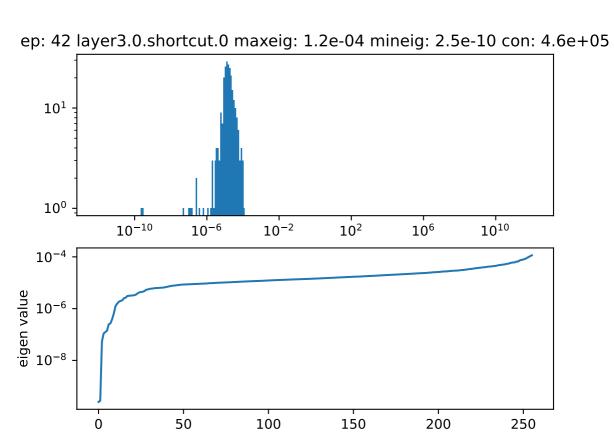
ep: 42 layer2.1.conv2 maxeig: 2.4e-04 mineig: 3.7e-06 con: 6.4e+01

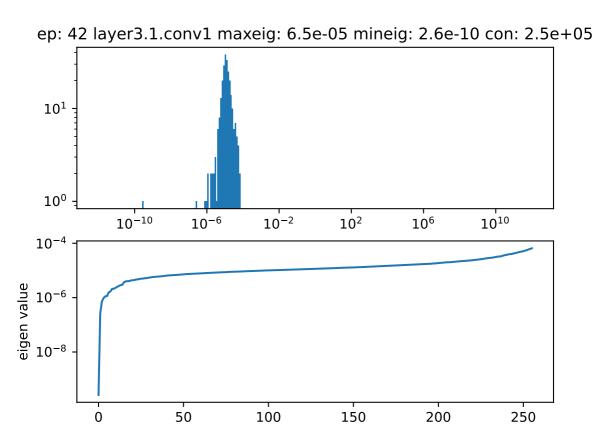


ep: 42 layer3.0.conv1 maxeig: 7.2e-05 mineig: 1.2e-10 con: 5.8e+05 10<sup>1</sup> 10<sup>0</sup> 10-10 1010 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-6}$ 10<sup>-5</sup>  $10^{-7}$  $10^{-9}$ 250 50 100 150 200

eigen value

ep: 42 layer3.0.conv2 maxeig: 1.9e-04 mineig: 5.2e-10 con: 3.6e+05  $10^{1}$ 10<sup>0</sup> 1010 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-10}$  $10^{-6}$  $10^{-4}$ eigen value 10<sub>-8</sub> 250 50 100 150 200





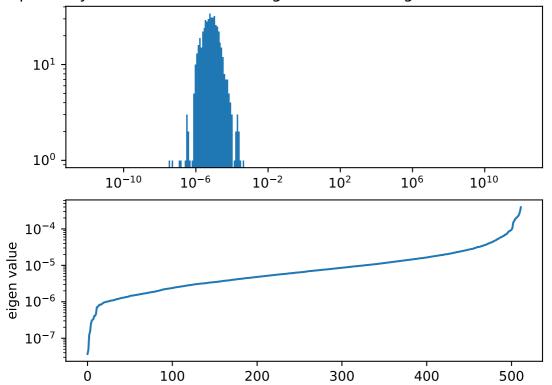
ep: 42 layer3.1.conv2 maxeig: 3.1e-04 mineig: 1.7e-06 con: 1.8e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10-10 10-6 10-2 10<sup>6</sup> eigen value 10<sup>-4</sup> 250 50 100 150 200

ep: 42 layer4.0.conv1 maxeig: 1.7e-04 mineig: 5.3e-07 con: 3.3e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup> 10-6 10-2 10<sup>6</sup>  $10^{-4}$ 10<sup>-5</sup>  $10^{-6}$ 100 500 200 300 400

eigen value

ep: 42 layer4.0.conv2 maxeig: 4.5e-04 mineig: 1.1e-07 con: 4.1e+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>  $10^{-4}$ eigen value 10<sup>-5</sup> 10<sup>-6</sup> 10-7 100 500 200 300 400

ep: 42 layer4.0.shortcut.0 maxeig: 3.9e-04 mineig: 3.7e-08 con: 1.1e+04



ep: 42 layer4.1.conv1 maxeig: 1.6e-04 mineig: 1.0e-10 con: 1.6e+06  $10^{1}$ 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>  $10^{-7}$  $10^{-9}$ 

200

300

400

500

100

eigen value

ep: 42 layer4.1.conv2 maxeig: 1.1e-03 mineig: 3.9e-08 con: 2.9e+04  $10^{1}$ 10<sup>0</sup> 11.11 10 10 10-10  $10^{-6}$  $10^{-2}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{-3}$  $10^{-4}$ en lo<sup>-4</sup> lo<sup>-5</sup> en lo<sup>-5</sup> lo<sup>-6</sup>  $10^{-7}$ 100 500 200 300 400

