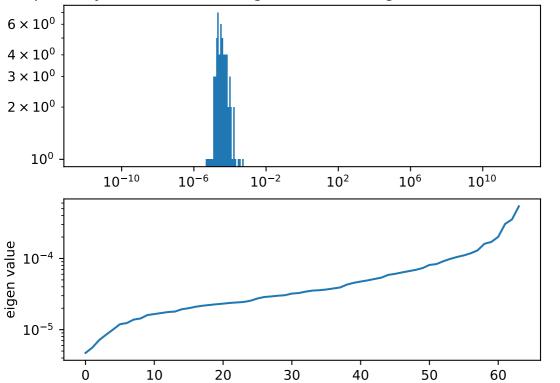
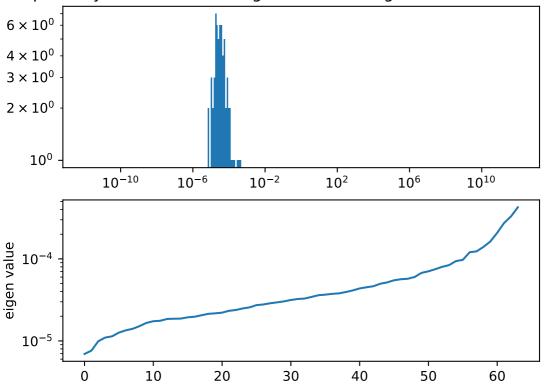


ep: 18 layer1.0.conv2 maxeig: 5.4e-04 mineig: 4.7e-06 con: 1.1e+02

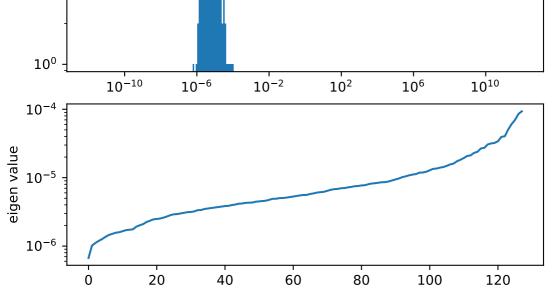


ep: 18 layer1.1.conv1 maxeig: 6.0e-05 mineig: 1.6e-06 con: 3.6e+01  $6 \times 10^{0}$  $4 \times 10^{0}$  $3 \times 10^{0}$  $2 \times 10^{0}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup>  $10^{-6}$ 10-2 10<sup>6</sup> eigen value 10-5 50 60 10 20 30 40

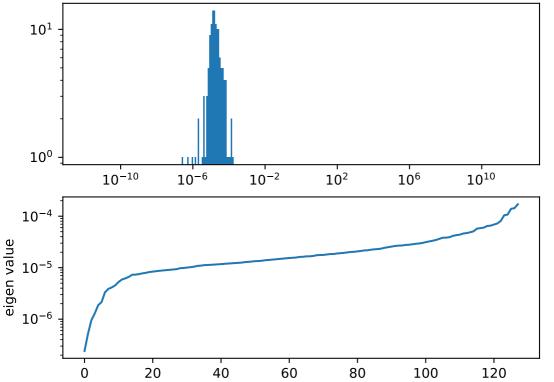
ep: 18 layer1.1.conv2 maxeig: 4.3e-04 mineig: 6.9e-06 con: 6.1e+01



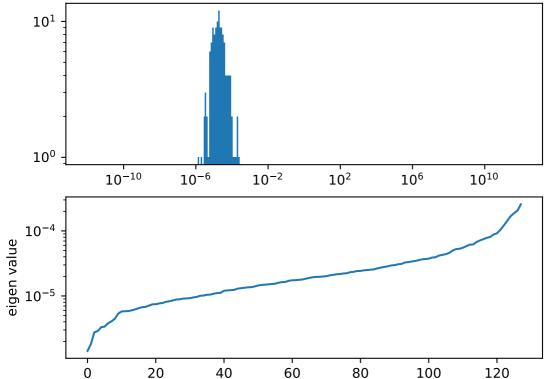
ep: 18 layer2.0.conv1 maxeig: 9.3e-05 mineig: 6.7e-07 con: 1.4e+02



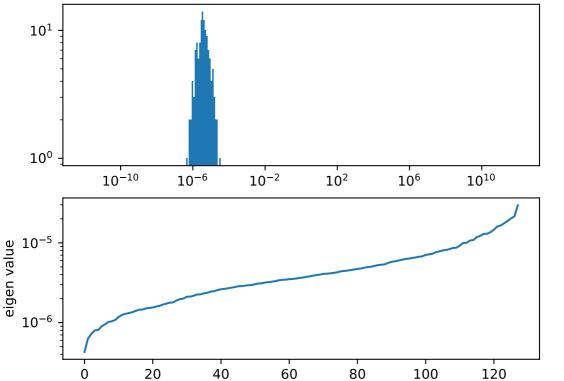
ep: 18 layer2.0.conv2 maxeig: 1.7e-04 mineig: 2.4e-07 con: 7.1e+02



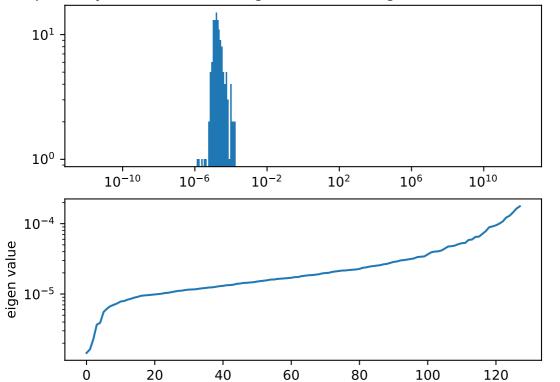
ep: 18 layer2.0.shortcut.0 maxeig: 2.6e-04 mineig: 1.4e-06 con: 1.8e+02



ep: 18 layer2.1.conv1 maxeig: 3.0e-05 mineig: 4.3e-07 con: 6.9e+01

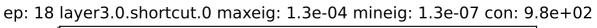


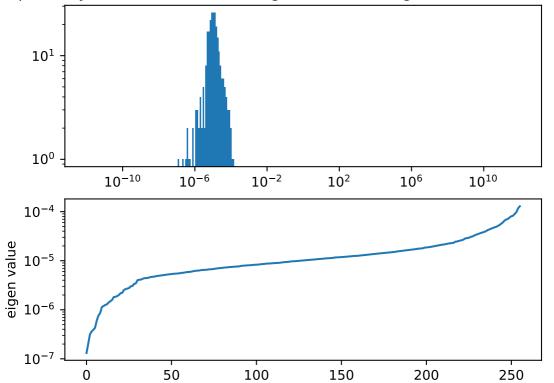
ep: 18 layer2.1.conv2 maxeig: 1.8e-04 mineig: 1.5e-06 con: 1.2e+02



ep: 18 layer3.0.conv1 maxeig: 5.5e-05 mineig: 1.4e-07 con: 3.9e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup>  $10^{-10}$ 10-2 10<sup>6</sup>  $10^{-6}$ eigen value 10<sup>-6</sup> 250 50 100 150 200

ep: 18 layer3.0.conv2 maxeig: 1.6e-04 mineig: 1.1e-07 con: 1.5e+03  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10  $10^{-6}$ 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-4}$ eigen value 10<sup>-5</sup> 10<sup>-5</sup>  $10^{-7}$ 250 50 100 150 200





ep: 18 layer3.1.conv1 maxeig: 3.8e-05 mineig: 2.6e-07 con: 1.5e+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> eigen value 10<sup>-5</sup> 10<sup>-5</sup> 250

100

150

200

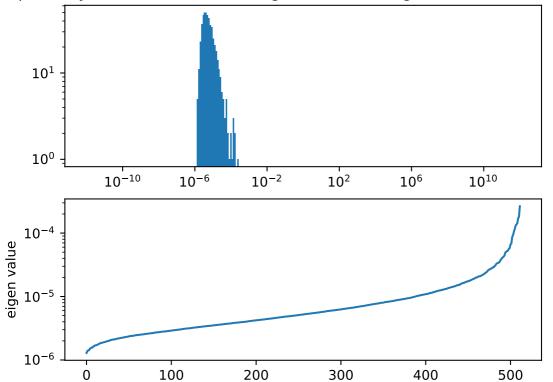
50

ep: 18 layer3.1.conv2 maxeig: 1.8e-04 mineig: 1.4e-06 con: 1.3e+02  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10-10 10-2 10-6 10<sup>6</sup>  $10^{-4}$ eigen value 50 250 100 150 200

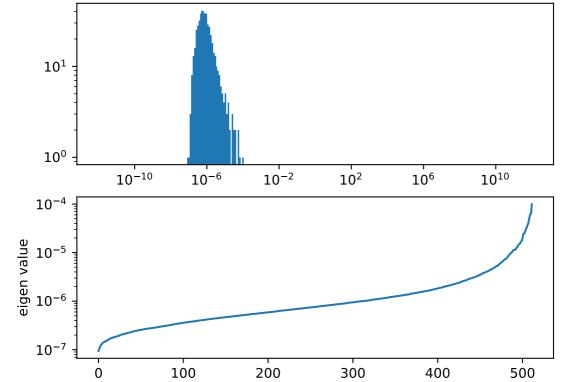
ep: 18 layer4.0.conv1 maxeig: 1.2e-04 mineig: 3.5e-07 con: 3.6e+02  $10^{1}$ 10<sup>0</sup> 10 10 10-10 10<sup>2</sup> 10-2 10<sup>6</sup>  $10^{-6}$  $10^{-4}$ eigen value 10<sup>-5</sup>  $10^{-6}$ 100 500 200 300 400

ep: 18 layer4.0.conv2 maxeig: 1.5e-04 mineig: 7.2e-07 con: 2.1e+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>  $10^{-4}$ eigen value 10<sup>-5</sup>  $10^{-6}$ 100 500 200 300 400

ep: 18 layer4.0.shortcut.0 maxeig: 2.6e-04 mineig: 1.3e-06 con: 2.1e+02



ep: 18 layer4.1.conv1 maxeig: 9.9e-05 mineig: 9.4e-08 con: 1.1e+03



ep: 18 layer4.1.conv2 maxeig: 2.3e-04 mineig: 5.0e-07 con: 4.5e+02  $10^{1}$ 10<sup>0</sup> 10 10 10-10 10<sup>2</sup>  $10^{-6}$ 10-2 10<sup>6</sup>  $10^{-4}$ eigen value 10-5  $10^{-6}$ 100 500 200 300 400

