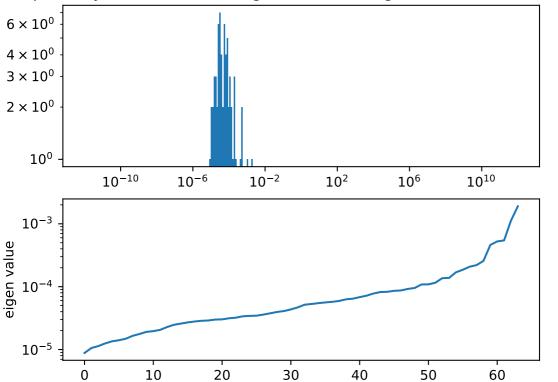
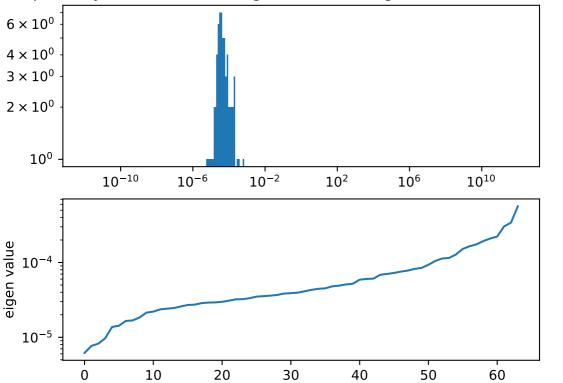


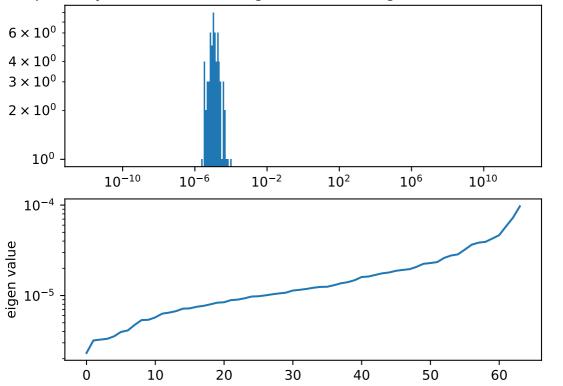
ep: 30 layer1.0.conv1 maxeig: 1.9e-03 mineig: 8.8e-06 con: 2.2e+02



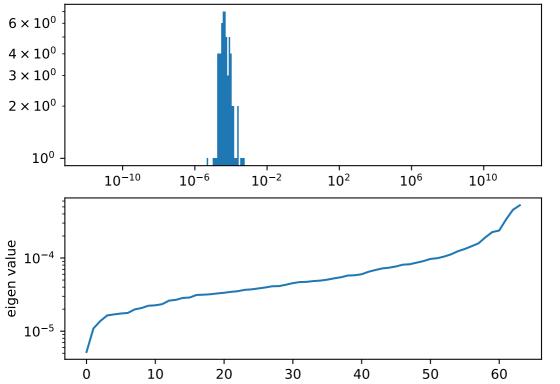
ep: 30 layer1.0.conv2 maxeig: 5.6e-04 mineig: 6.2e-06 con: 9.2e+01



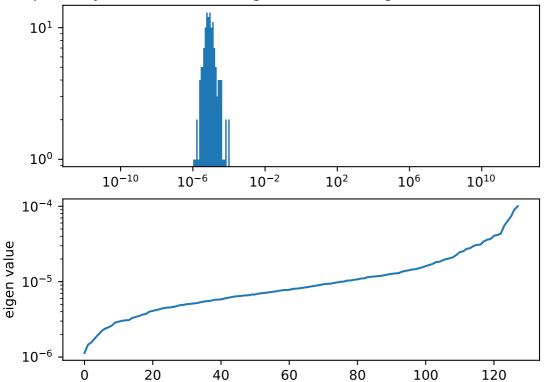
ep: 30 layer1.1.conv1 maxeig: 9.7e-05 mineig: 2.3e-06 con: 4.2e+01



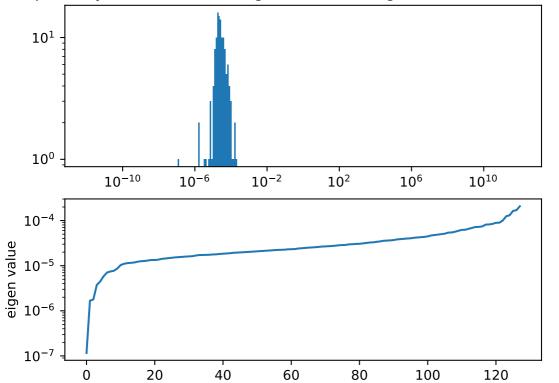
ep: 30 layer1.1.conv2 maxeig: 5.3e-04 mineig: 5.2e-06 con: 1.0e+02



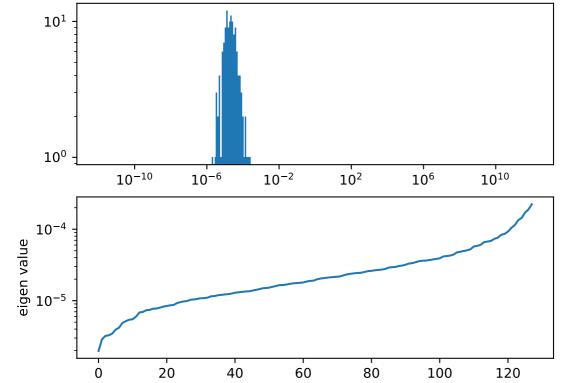
ep: 30 layer2.0.conv1 maxeig: 1.0e-04 mineig: 1.1e-06 con: 8.8e+01



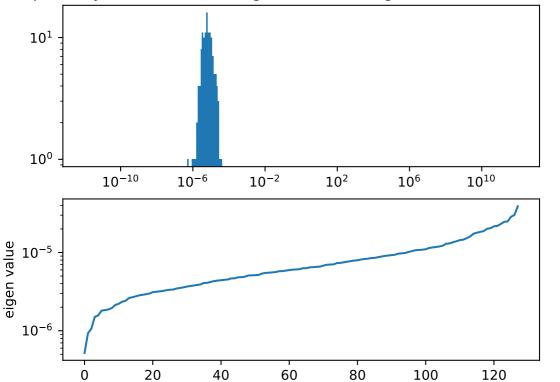
ep: 30 layer2.0.conv2 maxeig: 2.1e-04 mineig: 1.2e-07 con: 1.8e+03



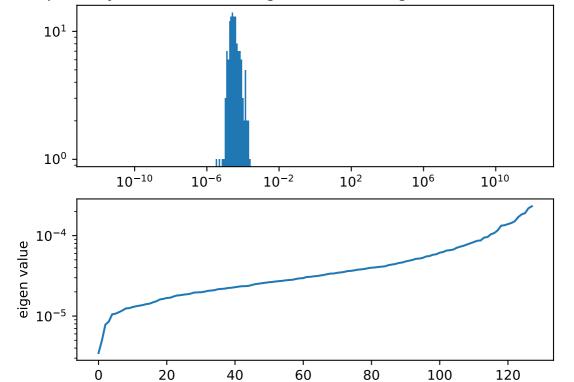
ep: 30 layer2.0.shortcut.0 maxeig: 2.2e-04 mineig: 2.0e-06 con: 1.1e+02

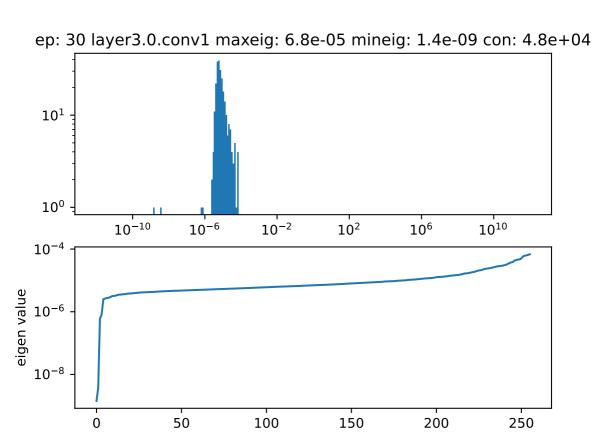


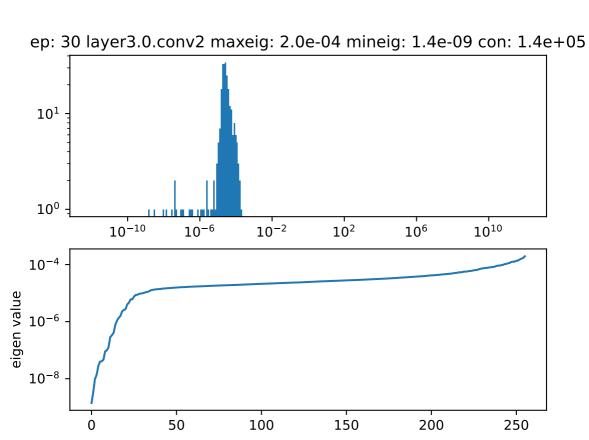
ep: 30 layer2.1.conv1 maxeig: 3.9e-05 mineig: 5.2e-07 con: 7.5e+01

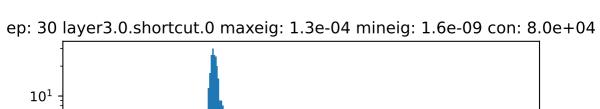


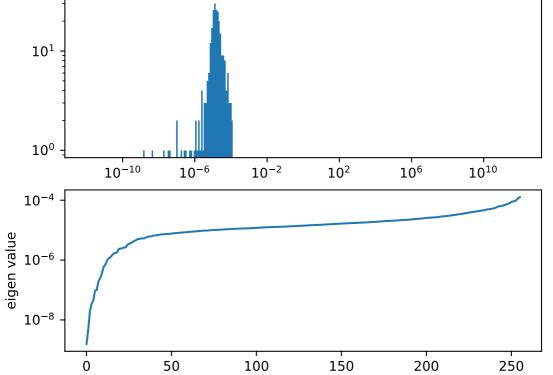
ep: 30 layer2.1.conv2 maxeig: 2.3e-04 mineig: 3.5e-06 con: 6.7e+01











ep: 30 layer3.1.conv1 maxeig: 6.3e-05 mineig: 4.6e-09 con: 1.4e+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<sup>-5</sup> eigen value 10<sup>-7</sup> 250 50 100 150 200

ep: 30 layer3.1.conv2 maxeig: 3.0e-04 mineig: 1.1e-06 con: 2.8e+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>  $10^{-6}$ 250 50 100 150 200

ep: 30 layer4.0.conv1 maxeig: 1.8e-04 mineig: 5.3e-07 con: 3.4e+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: 30 layer4.0.conv2 maxeig: 4.3e-04 mineig: 3.0e-07 con: 1.5e+03  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup>  $10^{-10}$ 10-2 10<sup>6</sup>  $10^{-6}$  $10^{-4}$ 10<sup>-5</sup>  $10^{-6}$ 

200

300

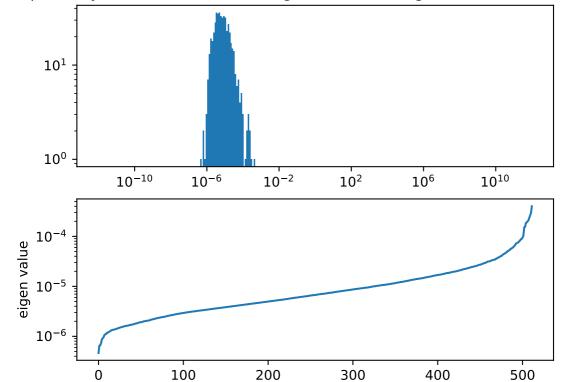
400

500

100

eigen value

ep: 30 layer4.0.shortcut.0 maxeig: 4.0e-04 mineig: 4.7e-07 con: 8.6e+02



ep: 30 layer4.1.conv1 maxeig: 1.2e-04 mineig: 1.5e-09 con: 8.3e+04  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup> 10-6 10-2 10<sup>6</sup>  $10^{-4}$  $10^{-6}$ 10-8

200

300

400

500

100

eigen value

ep: 30 layer4.1.conv2 maxeig: 1.1e-03 mineig: 9.2e-08 con: 1.2e+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> eigen 10<sup>-4</sup> 10<sup>-5</sup> 10<sup>-6</sup>  $10^{-4}$  $10^{-7}$ 

200

300

400

500

100

