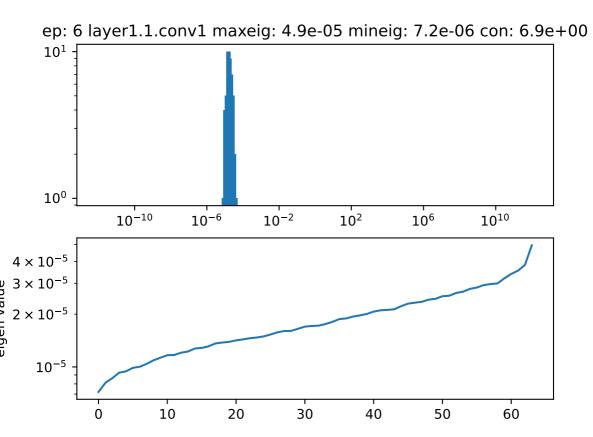


ep: 6 layer1.0.conv2 maxeig: 3.2e-04 mineig: 2.3e-05 con: 1.4e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup>  $10^{-6}$ 10-2 10<sup>6</sup>  $10^{-4}$ 20 50 60 10 30 40

eigen value



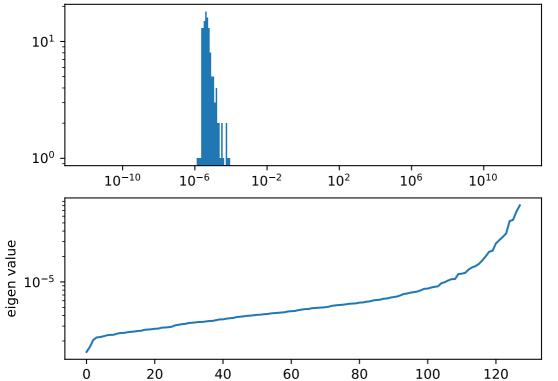
ep: 6 layer1.1.conv2 maxeig: 1.0e-04 mineig: 6.7e-06 con: 1.5e+01 10<sup>1</sup> 10<sup>0</sup> 10<sup>10</sup> 10-10 10-2 10<sup>2</sup> 10<sup>6</sup>  $10^{-6}$  $10^{-4}$  $10^{-5}$ 50 60 10 20 30 40

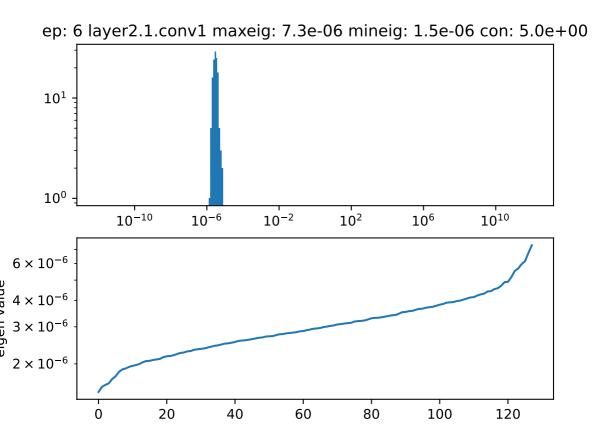
eigen value

ep: 6 layer2.0.conv1 maxeig: 2.9e-05 mineig: 1.7e-06 con: 1.7e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup>  $10^{-6}$ 10-2 10<sup>6</sup> eigen value 60 100 20 40 80 120

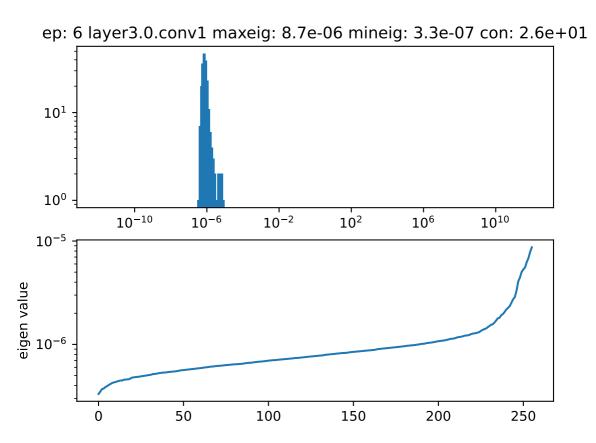
ep: 6 layer2.0.conv2 maxeig: 3.5e-05 mineig: 3.1e-06 con: 1.1e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10<sup>2</sup> 10-10 10-2  $10^{-6}$ 10<sup>6</sup> eigen value 20 60 100 40 80 120

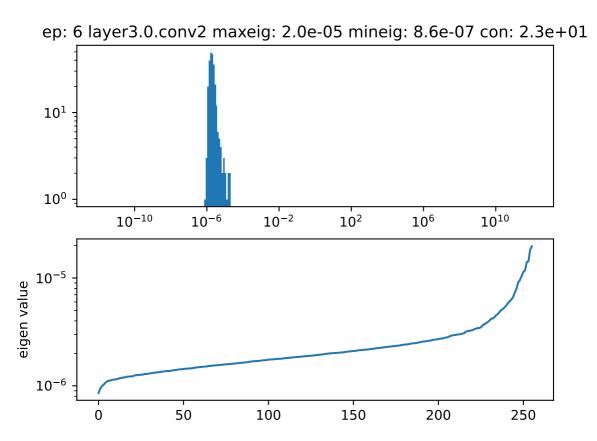
ep: 6 layer2.0.shortcut.0 maxeig: 8.1e-05 mineig: 1.5e-06 con: 5.5e+01



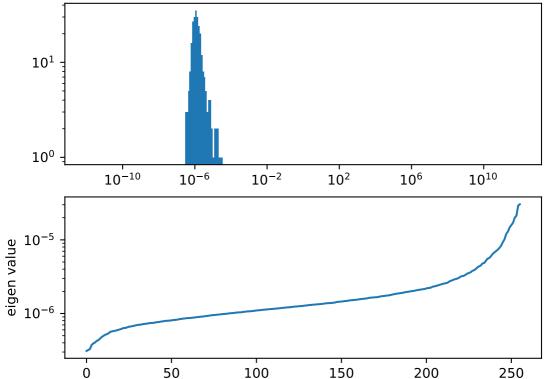


ep: 6 layer2.1.conv2 maxeig: 2.6e-05 mineig: 2.7e-06 con: 9.7e+00  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup> 10-2 10<sup>6</sup>  $10^{-6}$ eigen value 10<sup>-5</sup> 60 20 40 80 100 120

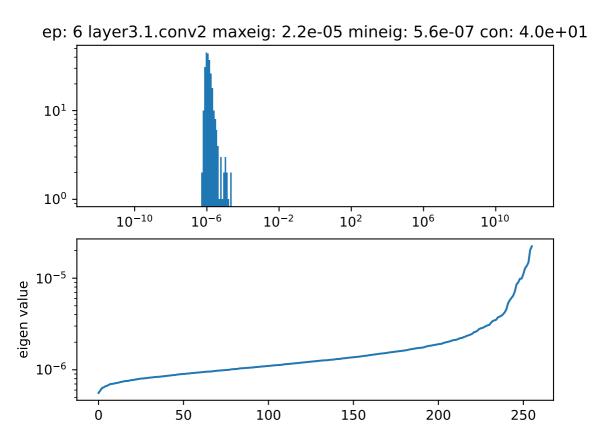




ep: 6 layer3.0.shortcut.0 maxeig: 3.0e-05 mineig: 3.1e-07 con: 9.8e+01



ep: 6 layer3.1.conv1 maxeig: 5.3e-06 mineig: 3.1e-07 con: 1.7e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup> 10-2 10<sup>6</sup>  $10^{-6}$ eigen value 10<sup>-6</sup> 250 50 100 150 200

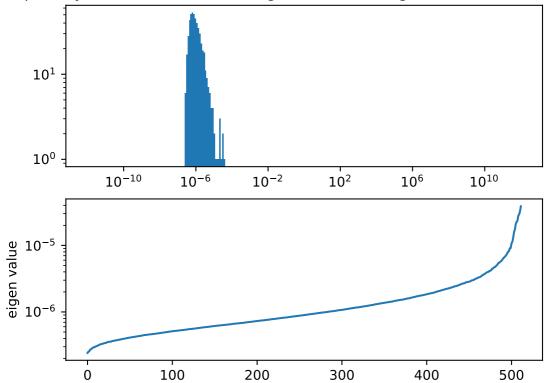


ep: 6 layer4.0.conv1 maxeig: 1.6e-05 mineig: 6.8e-08 con: 2.4e+02  $10^{1}$ 10<sup>0</sup> 10 10 10-10 10<sup>2</sup>  $10^{-6}$ 10-2 10<sup>6</sup>  $10^{-5}$  $10^{-6}$  $10^{-7}$ 100 500 200 300 400

eigen value

ep: 6 layer4.0.conv2 maxeig: 3.5e-05 mineig: 3.9e-07 con: 9.1e+01  $10^{1}$ 10<sup>0</sup> 10<sup>10</sup> 10-10 10<sup>2</sup> 10-2 10<sup>6</sup>  $10^{-6}$  $10^{-5}$ eigen value  $10^{-6}$ 100 500 200 300 400

ep: 6 layer4.0.shortcut.0 maxeig: 3.9e-05 mineig: 2.4e-07 con: 1.6e+02



ep: 6 layer4.1.conv1 maxeig: 4.8e-05 mineig: 1.2e-07 con: 4.2e+02  $10^{1}$ 10<sup>0</sup> 10 10 10-10  $10^{-6}$ 10<sup>2</sup> 10<sup>6</sup>  $10^{-2}$ eigen value 10<sup>-5</sup> 10<sup>-5</sup>  $10^{-7}$ 100 500 200 300 400

ep: 6 layer4.1.conv2 maxeig: 1.4e-04 mineig: 1.7e-07 con: 8.2e+02 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<sup>-5</sup>  $10^{-5}$ 100 500 200 300 400

