Table 1: SSL Comparison: mnist: Average (standard deviation) classification accuracy over 100 trials.

| # Labels | 10 | 20 | 30 | 40 | 50 |
|---|---------------|---------------|---------------|-------------|-------------|
| Laplace Learning | 16.0 (6.2) | 27.2 (11.6) | 42.0 (13.6) | 58.1 (13.3) | 70.3 (12.1) |
| Poisson Learning | 92.4(4.2) | 95.1 (1.4) | 95.7(0.8) | 96.0 (0.5) | 96.2(0.4) |
| P-EIKONAL (P= 1.00 , ALPHA= 0.00) | 80.8 (5.8) | 88.2(3.0) | 90.4(2.4) | 92.0(1.4) | 92.9(1.4) |
| P-EIKONAL (P= 1.00 , ALPHA= 0.00)+CP | 87.2(4.6) | 91.2(2.0) | 92.5(1.6) | 93.5(1.3) | 94.0(1.1) |
| P-EIKONAL (P= 1.00 , ALPHA= 1.00) | 73.1(6.8) | 83.6 (4.9) | 87.4(3.3) | 89.9(2.3) | 91.5 (1.9) |
| p-eikonal (p=1.00, alpha=1.00)+ CP | 91.0(4.0) | 93.6(1.4) | 94.5(1.1) | 95.0 (0.8) | 95.2(0.8) |
| P-EIKONAL (P= 1.00 , ALPHA= 2.00) | 57.3(8.1) | 70.8(6.9) | 78.0(5.3) | 82.2(3.9) | 85.5(3.3) |
| p-eikonal (p=1.00, alpha= 2.00)+CP | 92.7(3.7) | 94.5(1.3) | $95.1\ (1.1)$ | 95.5(0.7) | 95.6 (0.8) |
| P-EIKONAL (P= 1.00 , ALPHA= 3.00) | 47.1 (8.9) | $61.0\ (7.6)$ | 70.5(6.4) | 75.7(4.7) | 80.1 (4.2) |
| p-eikonal (p=1.00, alpha= 3.00)+CP | 93.0 (3.7) | 94.5 (1.8) | 95.0(1.6) | 95.5 (0.8) | 95.6 (0.9) |
| Graph NN (alpha=0.00) | 54.4 (4.8) | 64.2(3.6) | 68.3(3.0) | 71.1(2.9) | 73.0(2.6) |
| Graph NN (alpha= $0.00)+CP$ | 56.3(4.8) | 65.7(3.7) | 69.7(3.0) | 72.5(2.8) | 74.1(2.6) |
| Graph NN (alpha=1.00) | 59.2(5.3) | 69.1 (3.7) | 73.2(3.0) | 76.3(2.4) | 77.9(2.3) |
| Graph NN (alpha= $1.00)+CP$ | 66.3(5.4) | 75.1(3.7) | 78.5(3.1) | 81.0(2.5) | 82.2(2.3) |
| Graph NN (alpha=2.00) | $47.1\ (7.0)$ | 57.2(5.5) | 62.4(4.4) | 66.2(3.2) | 68.7(3.1) |
| Graph NN (alpha= $2.00)+CP$ | 74.4(5.5) | 80.9(3.6) | 83.3(3.0) | 85.1(2.2) | 85.9(2.0) |
| Graph NN (alpha=3.00) | 35.5(7.4) | 45.7(6.3) | 51.5(5.5) | 56.0(4.1) | 59.3(4.1) |
| Graph NN (alpha=3.00)+CP | 78.8 (5.4) | 83.7 (3.3) | 85.6(2.7) | 86.8 (2.0) | 87.3 (1.9) |