Table 1: SSL Comparison: mnist: Average (standard deviation) classification accuracy over 12 trials.

| # Labels | 10 | 20 | 30 | 40 | 50 |
|---|---------------|---------------|-------------|-------------|------------|
| Laplace Learning | 17.3 (9.0) | 36.5 (10.4) | 56.4 (12.3) | 60.9 (12.8) | 75.4 (8.8) |
| Poisson Learning | $93.3\ (2.5)$ | 96.0 (0.5) | 96.1 (0.3) | 96.3 (0.2) | 96.5 (0.2) |
| P-EIKONAL (P= 1.00 , ALPHA= 0.00) | 82.5(3.9) | 88.8(2.6) | 90.7(1.9) | 90.9(1.5) | 92.8(1.2) |
| P-EIKONAL (P= 1.00 , ALPHA= 0.00)+CP | 86.1(3.7) | 90.4(2.1) | 91.8(2.0) | 92.0(1.7) | 93.9(0.8) |
| P-EIKONAL (P= 1.00 , ALPHA= 1.00) | 78.7(4.8) | $88.1\ (2.3)$ | 90.3(2.5) | 91.4(2.2) | 92.7(1.4) |
| p-eikonal (p=1.00, alpha=1.00)+ CP | 90.4(3.1) | 93.3(1.4) | 94.0 (1.6) | 94.2(1.8) | 95.2(0.6) |
| P-EIKONAL (P= 1.00 , ALPHA= 2.00) | 63.8(7.3) | 79.8(4.6) | 83.8(4.1) | 87.2(3.5) | 89.5(2.1) |
| P-EIKONAL (P= 1.00 , ALPHA= 2.00)+CP | 92.5(2.9) | 94.1(2.0) | 94.8 (1.6) | 94.9(2.3) | 95.7(0.5) |
| P-EIKONAL (P= 1.00 , ALPHA= 3.00) | 53.6 (8.1) | 71.1 (6.9) | 77.0(5.8) | 82.4(3.9) | 85.9(2.7) |
| p-eikonal (p=1.00, alpha= 3.00)+CP | 92.7(3.7) | 93.9(2.6) | 95.0(1.7) | 95.1(2.6) | 95.7(0.5) |
| Graph NN (alpha=0.00) | 56.7(6.3) | 66.9(4.5) | 71.4(3.3) | 72.5(2.7) | 75.4(1.8) |
| Graph NN (alpha= $0.00)+CP$ | 59.8(6.0) | 69.4 (4.6) | 73.2(3.7) | 74.0(2.6) | 77.0(1.9) |
| Graph NN (alpha=1.00) | 63.0(6.2) | 72.9(3.9) | 76.4(3.1) | 77.9(2.6) | 80.2(1.3) |
| Graph NN (alpha= 1.00)+CP | 69.0 (6.5) | 77.4(3.8) | 81.3(2.7) | 81.9(2.5) | 83.8(1.6) |
| Graph NN (alpha=2.00) | 50.8(7.1) | 63.0(5.1) | 67.0(3.7) | 70.5(2.9) | 74.1 (1.4) |
| Graph NN (alpha= $2.00)+CP$ | 76.1(6.7) | 82.4(3.8) | 85.8(2.1) | 86.2(2.2) | 87.5(1.3) |
| Graph NN (alpha=3.00) | 39.1 (8.8) | 52.5 (6.0) | 57.1 (4.2) | 61.5(3.6) | 66.8(2.4) |
| Graph NN (alpha= $3.00)+CP$ | 79.8 (7.0) | 84.8 (3.9) | 88.1 (1.6) | 88.4 (1.5) | 89.2 (1.3) |