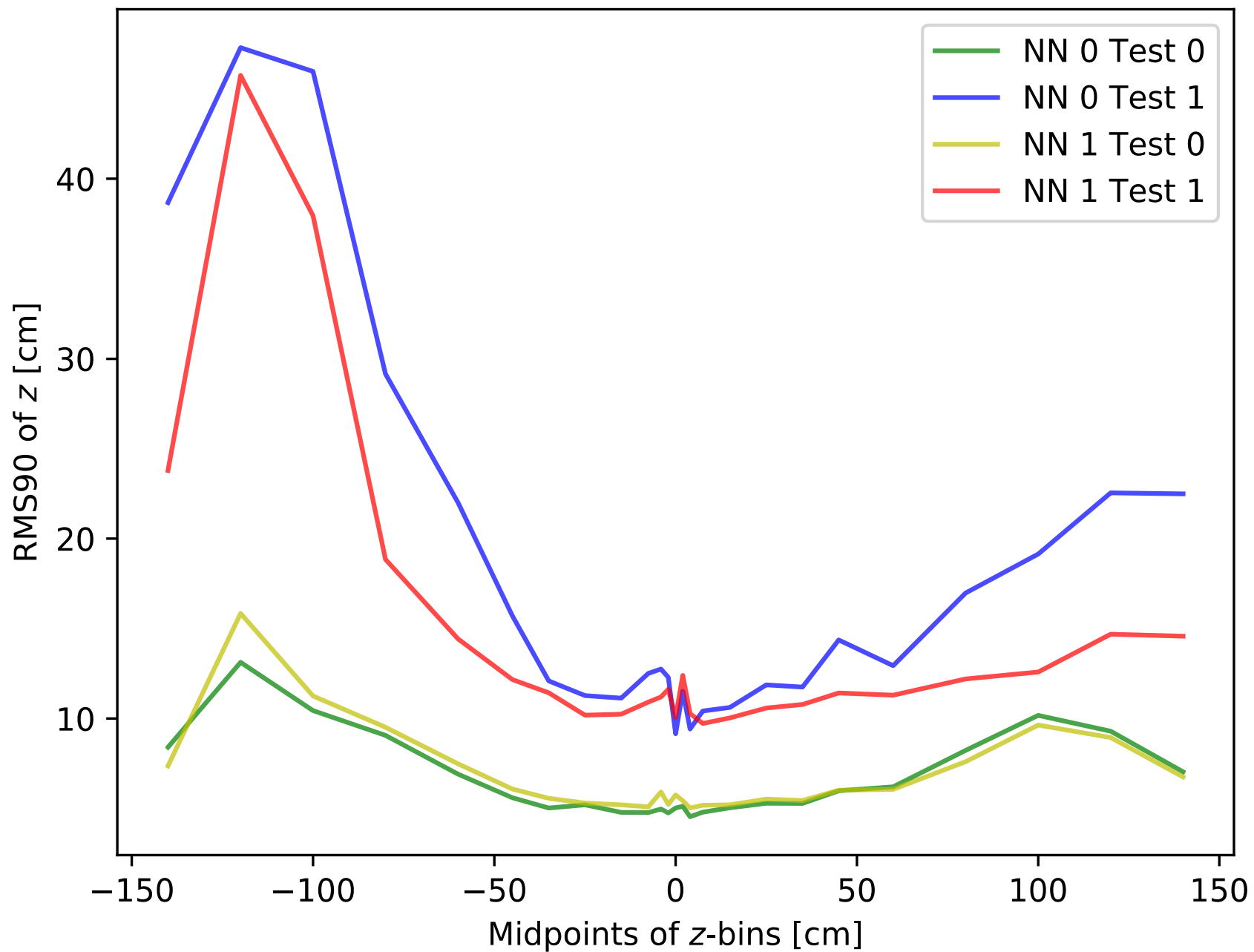


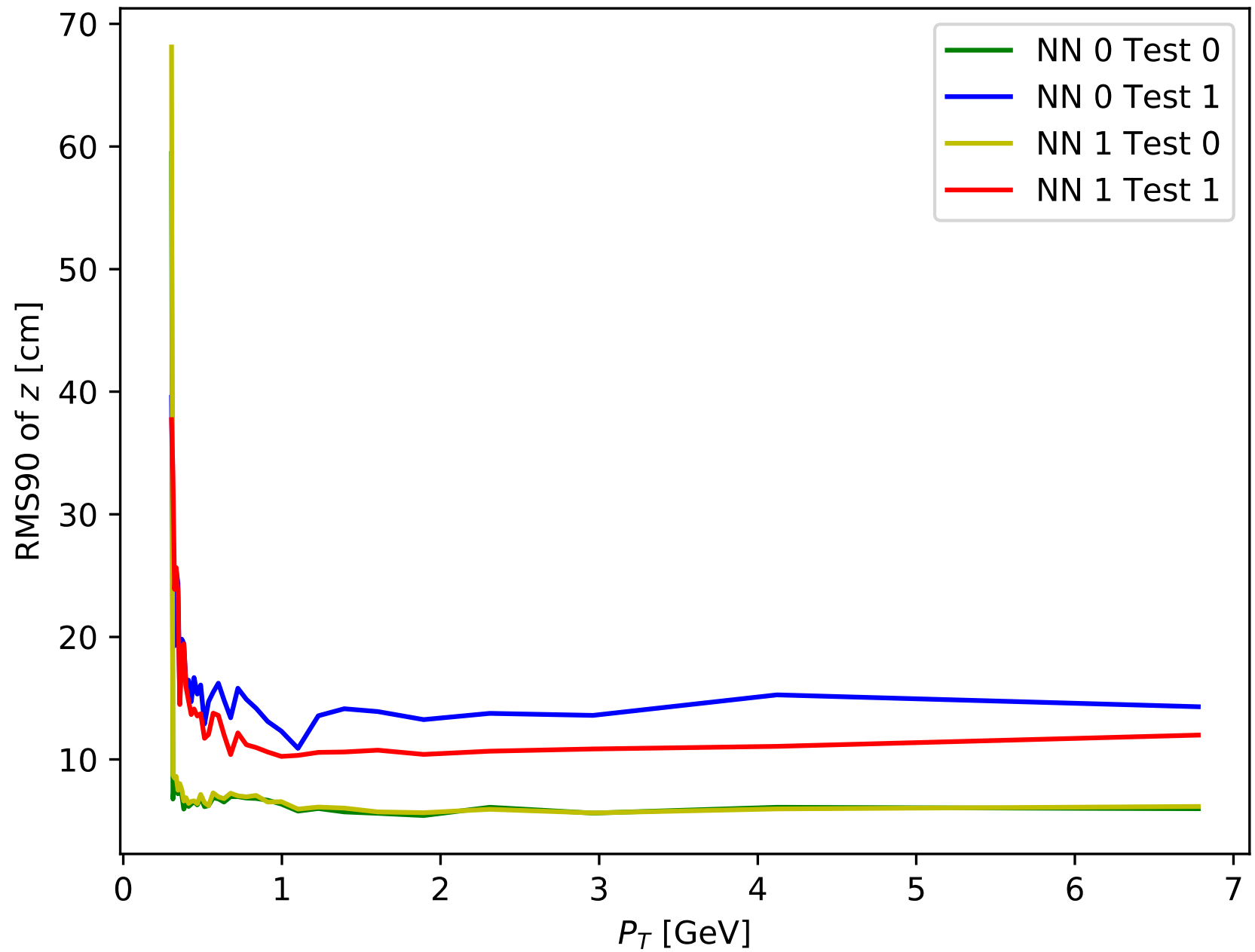
z-dependent z-Resolution, z trained [-150, 150]

z tested [-150, 150]



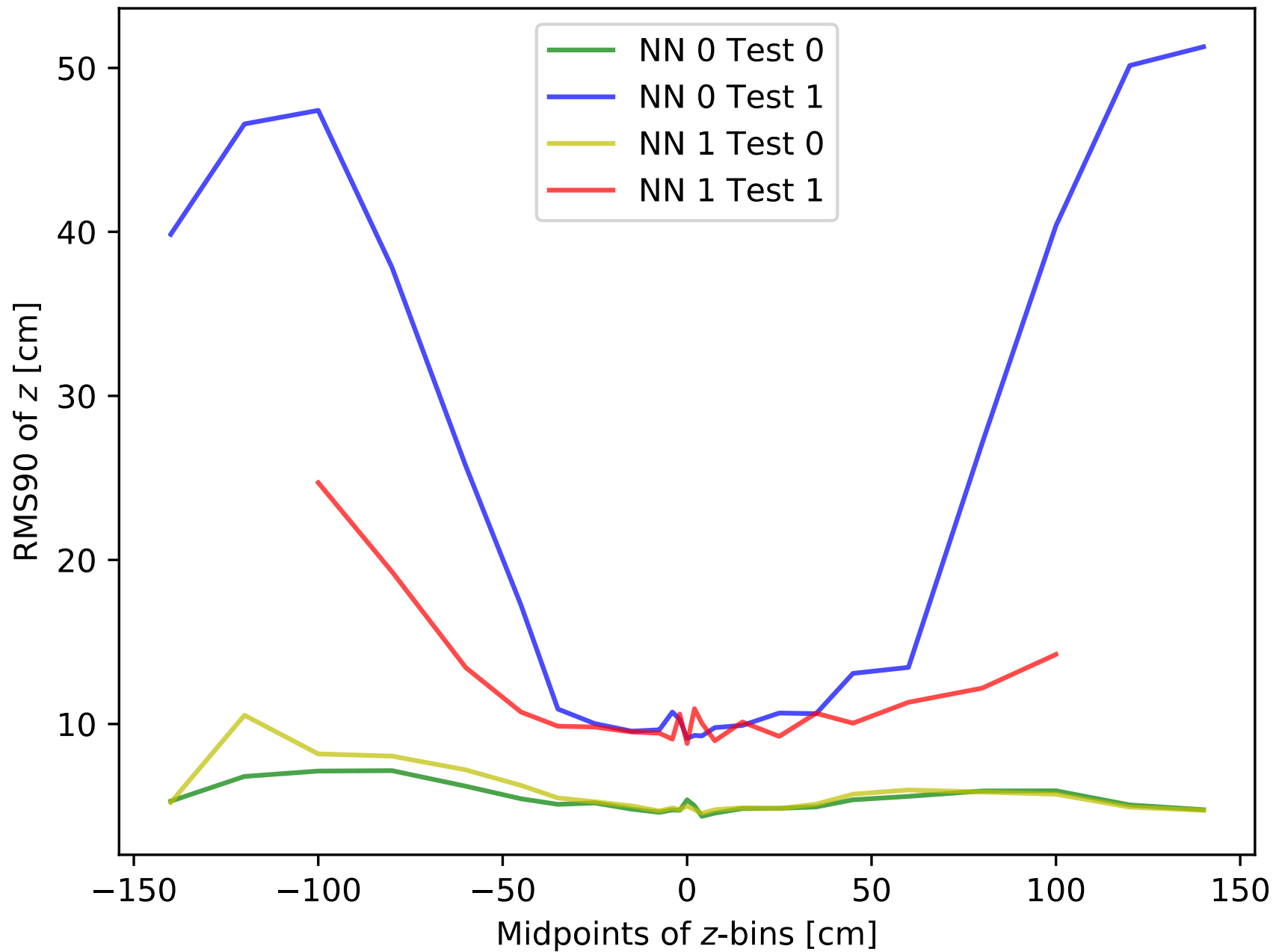
P_T dependent z-Resolution, z trained [-150, 150]

z tested [-150, 150] cm



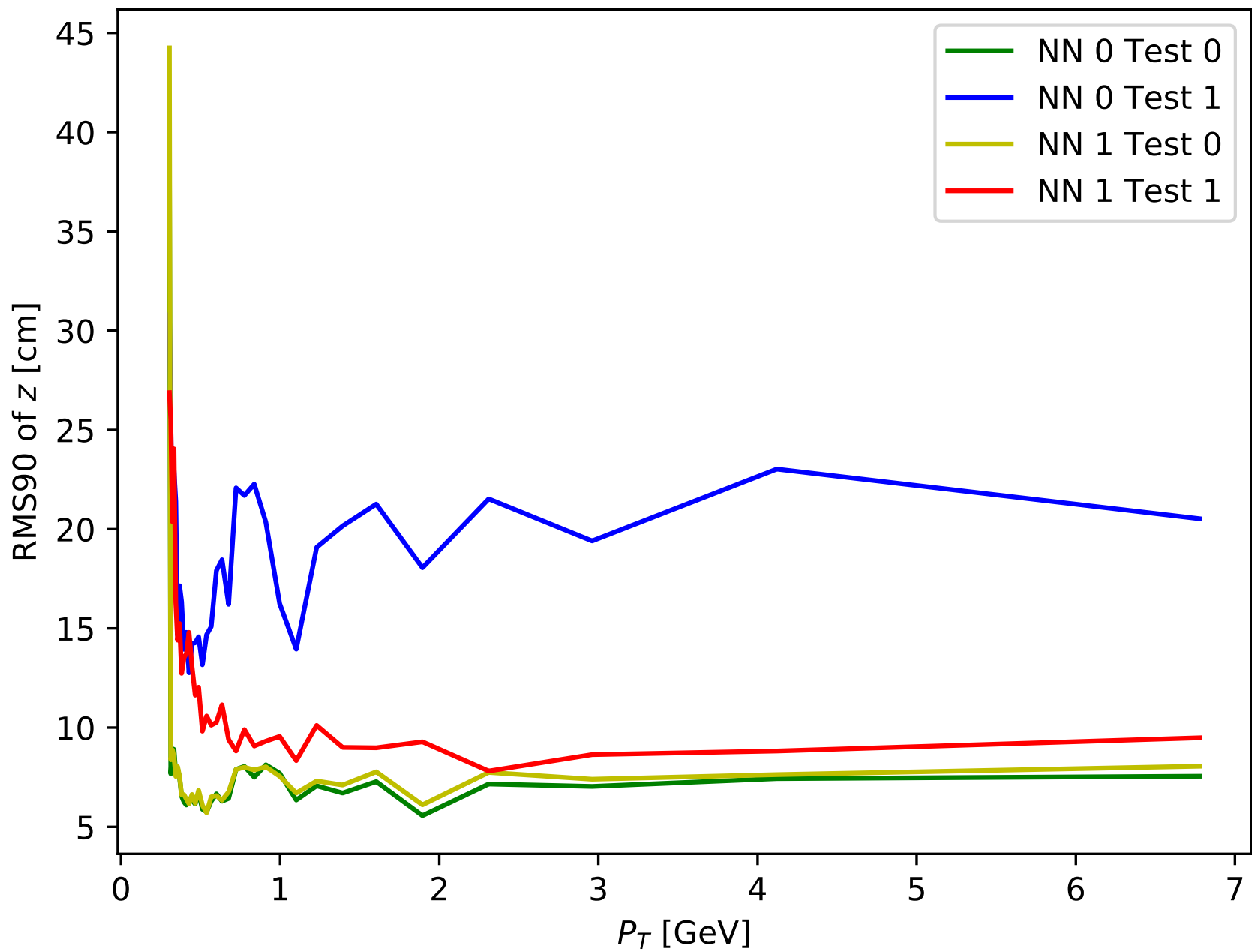
z-dependent z-Resolution, z trained [-150, 150]

z tested [-100, 100]



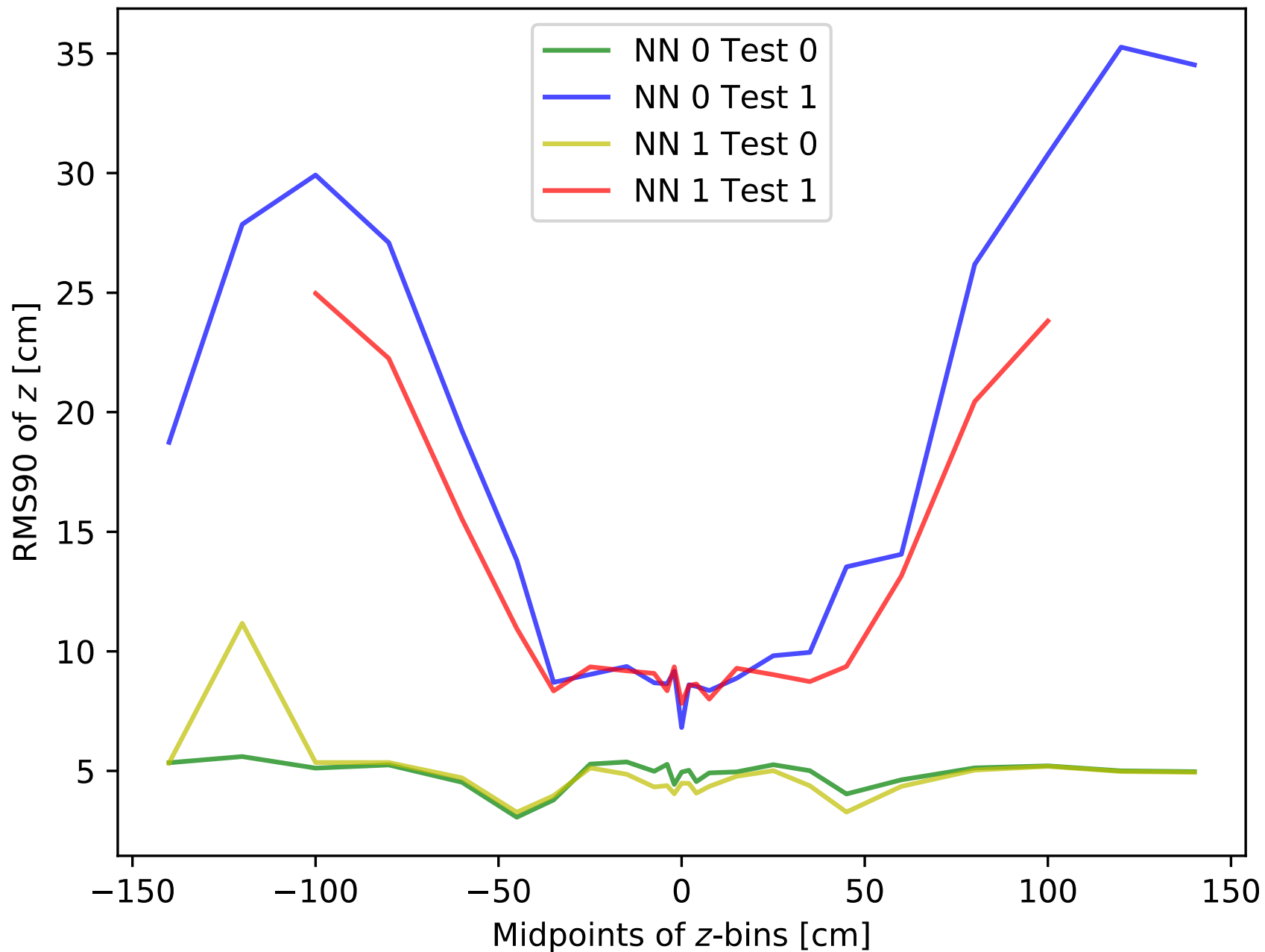
P_T dependent z -Resolution, z trained [-150, 150]

z tested [-100, 100] cm



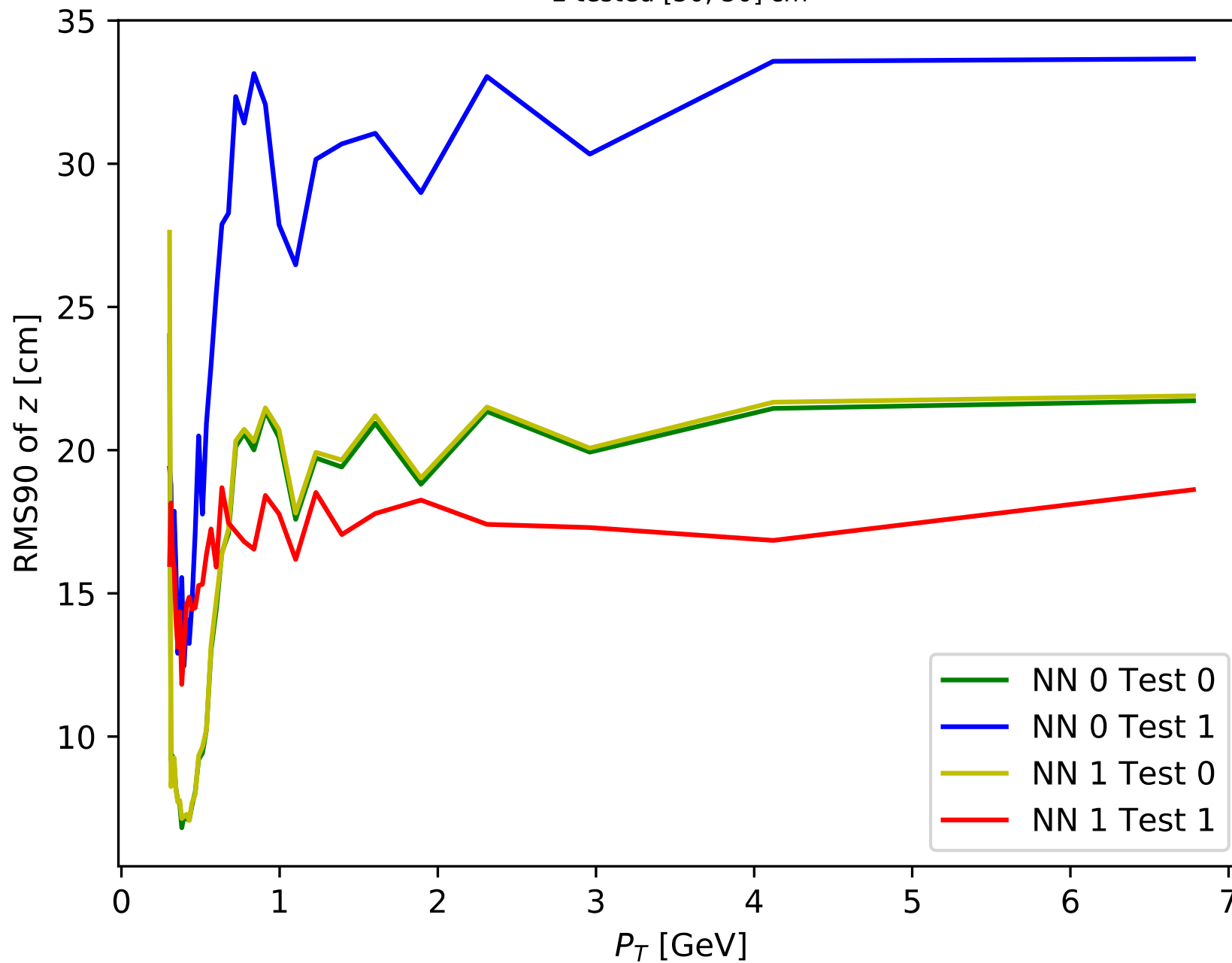
z-dependent z-Resolution, z trained [-150, 150]

z tested [50, 50]



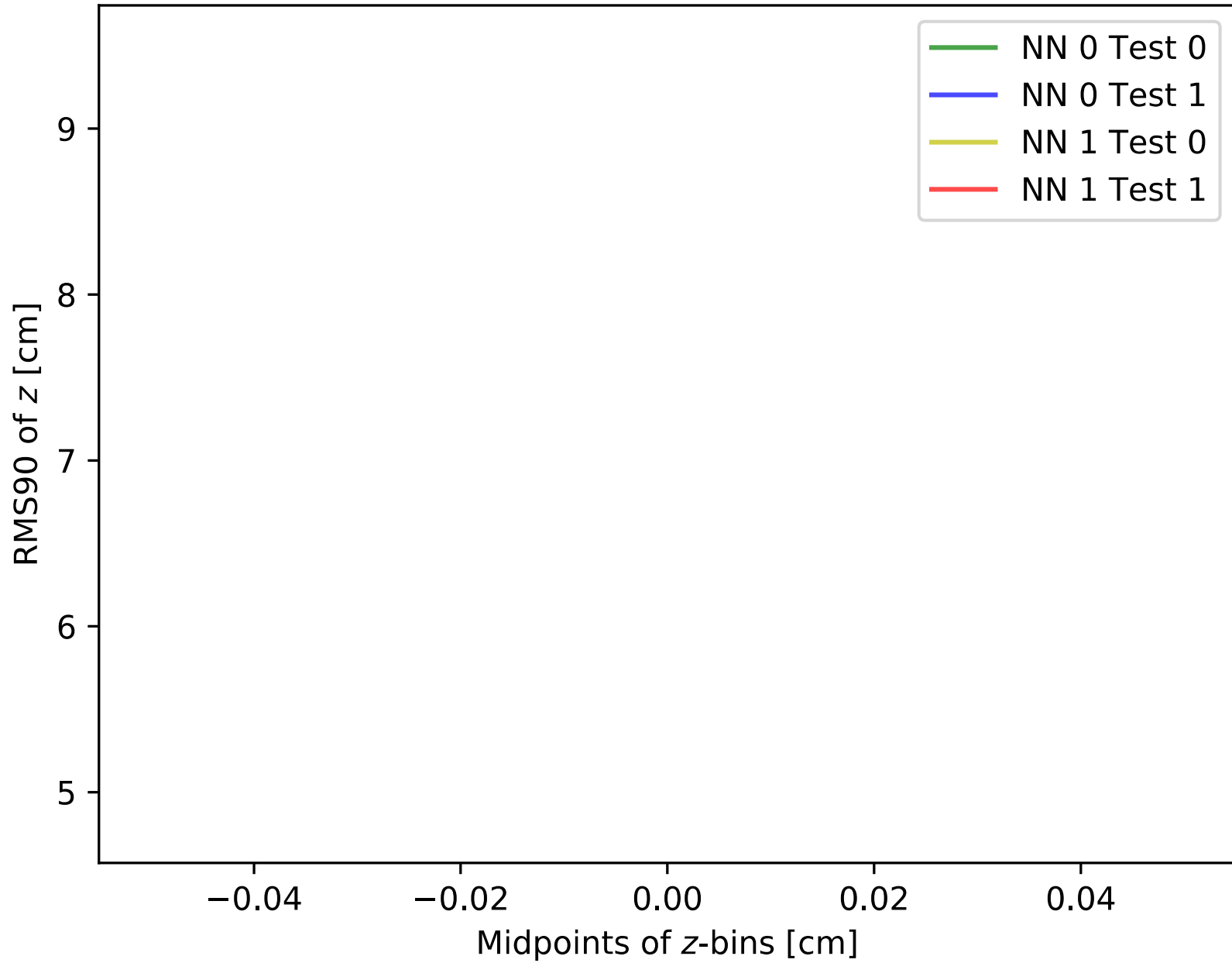
P_T dependent z-Resolution, z trained [-150, 150]

z tested [50, 50] cm



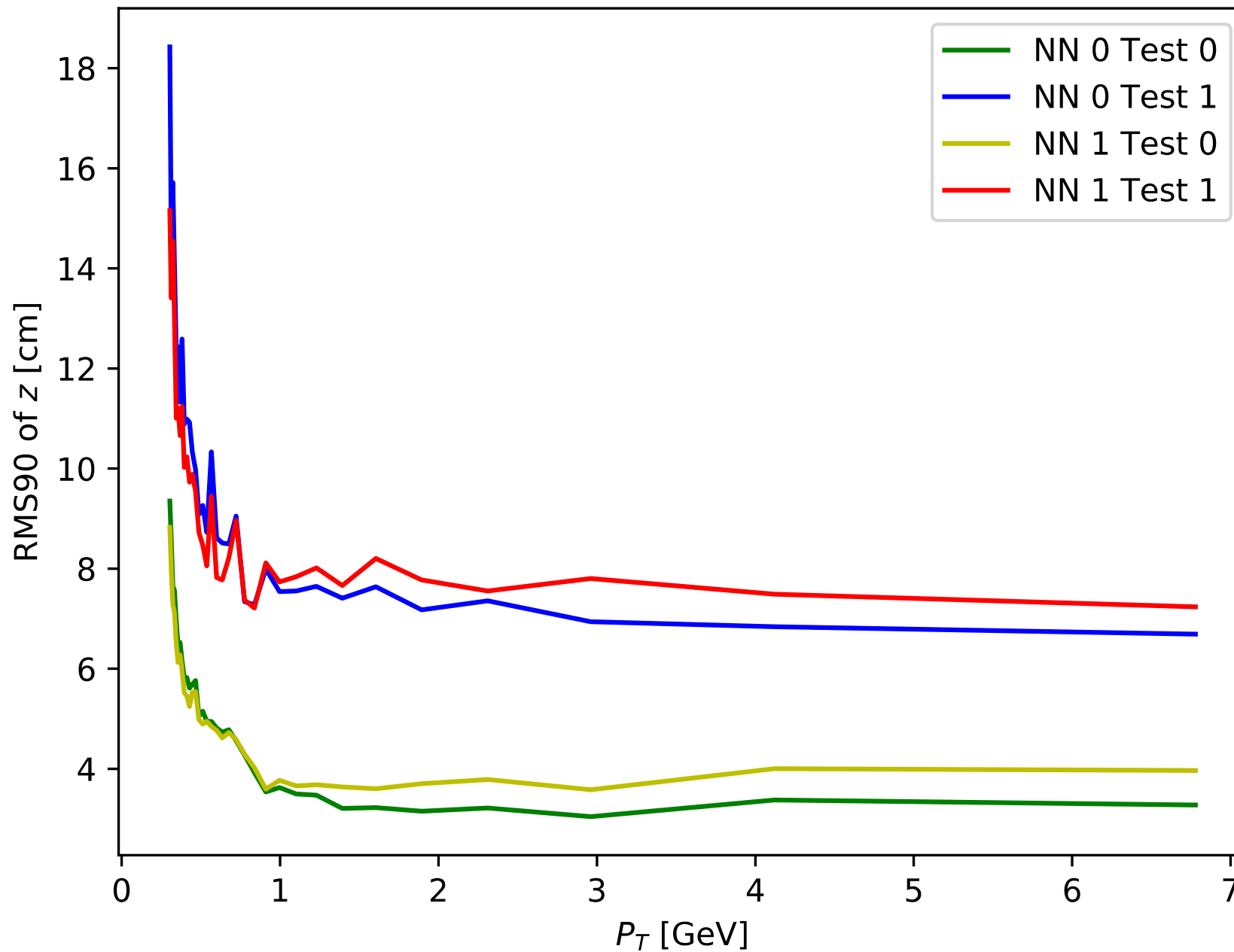
z-dependent z-Resolution, z trained [-150, 150]

z tested [-1, 1]



P_T dependent z-Resolution, z trained [-150, 150]

z tested [-1, 1] cm



NN: Trained [-150, 150], Tested [-150, 150]

true_cut: 1 pred_cut: 10	Positive/Signal	Negative/Background
True/Signal	True Positive: True in [-1, 1] Predicted in [-10, 10] NN_00: 84.8% ± 2.44% NN_01: 69.4% ± 3.04% NN_10: 80.6% ± 2.68% NN_11: 65.5% ± 3.14%	True Negative: True in [-150, -1] or [1, 150] Predicted in [-150, -10] or [10, 150] NN_00: 87.9% ± 0.255% NN_01: 88.0% ± 0.241% NN_10: 88.0% ± 0.254% NN_11: 88.1% ± 0.240%
False/Background	False Positive: True in [-150, -1] or [1, 150] Predicted in [-10, 10] NN_00: 12.1% ± 0.255% NN_01: 12.0% ± 0.241% NN_10: 12.0% ± 0.254% NN_11: 11.9% ± 0.240%	False Negative: True in [-1, 1] Predicted in [-150, -10] or [10, 150] NN_00: 15.2% ± 2.44% NN_01: 30.6% ± 3.04% NN_10: 19.4% ± 2.68% NN_11: 34.5% ± 3.14%

NN_00: NN trained without Bkg, tested without Bkg
 NN_01: NN trained without Bkg, tested with Bkg
 NN_10: NN trained with Bkg, tested without Bkg
 NN_11: NN trained with Bkg, tested with Bkg

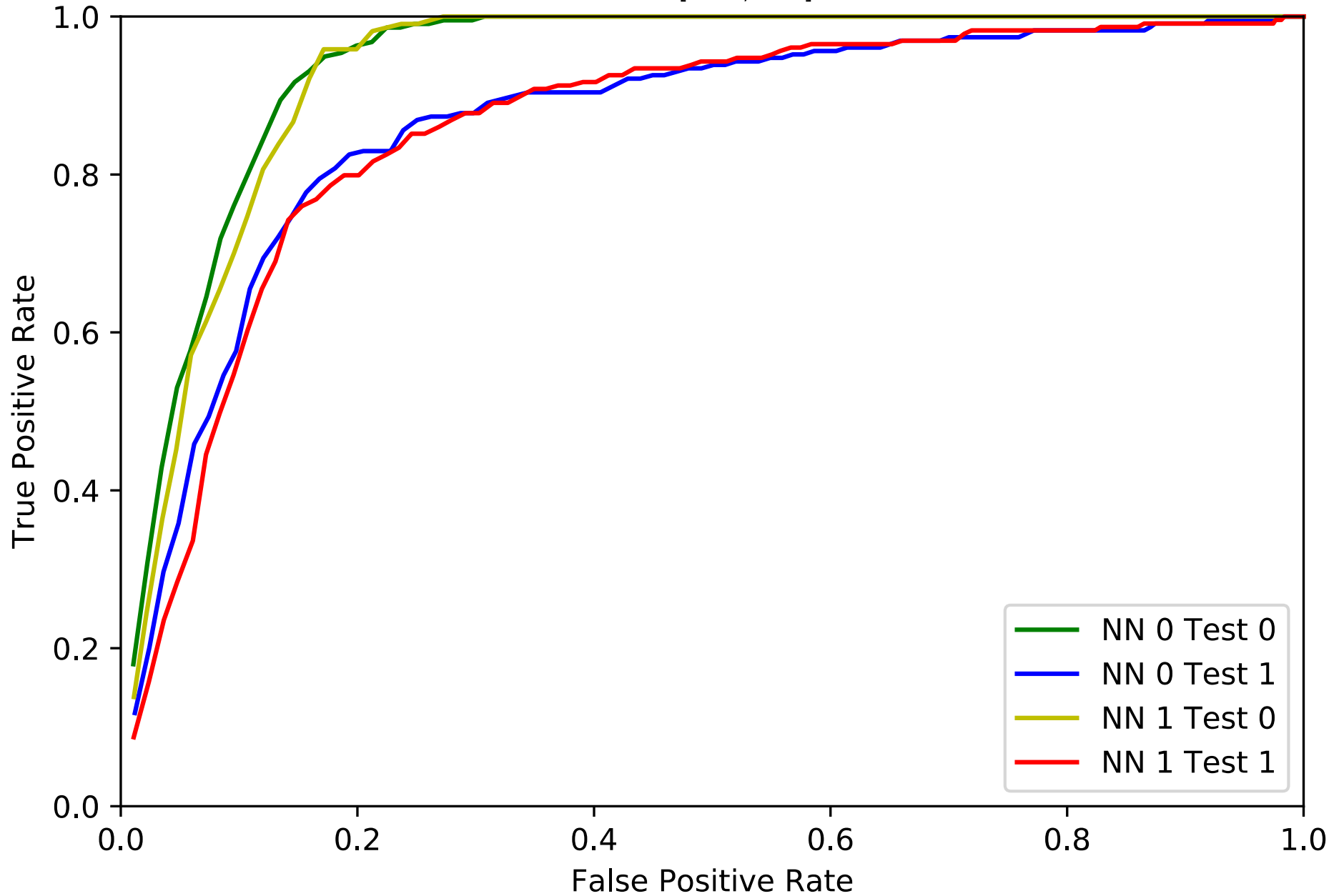
NN: Trained [-150, 150], Tested [-150, 150]

true_cut: 1 pred_cut: 7.5	Positive/Signal	Negative/Background
True/Signal	True Positive: True in [-1, 1] Predicted in [-7.5, 7.5] NN_00: 74.2% ± 2.97% NN_01: 56.3% ± 3.28% NN_10: 68.2% ± 3.16% NN_11: 53.3% ± 3.30%	True Negative: True in [-150, -1] or [1, 150] Predicted in [-150, -7.5] or [7.5, 150] NN_00: 91.0% ± 0.224% NN_01: 90.8% ± 0.214% NN_10: 91.1% ± 0.222% NN_11: 91.0% ± 0.211%
False/Background	False Positive: True in [-150, -1] or [1, 150] Predicted in [-7.5, 7.5] NN_00: 9.00% ± 0.224% NN_01: 9.23% ± 0.214% NN_10: 8.94% ± 0.222% NN_11: 9.00% ± 0.211%	False Negative: True in [-1, 1] Predicted in [-150, -7.5] or [7.5, 150] NN_00: 25.8% ± 2.97% NN_01: 43.7% ± 3.28% NN_10: 31.8% ± 3.16% NN_11: 46.7% ± 3.30%

NN_00: NN trained without Bkg, tested without Bkg
 NN_01: NN trained without Bkg, tested with Bkg
 NN_10: NN trained with Bkg, tested without Bkg
 NN_11: NN trained with Bkg, tested with Bkg

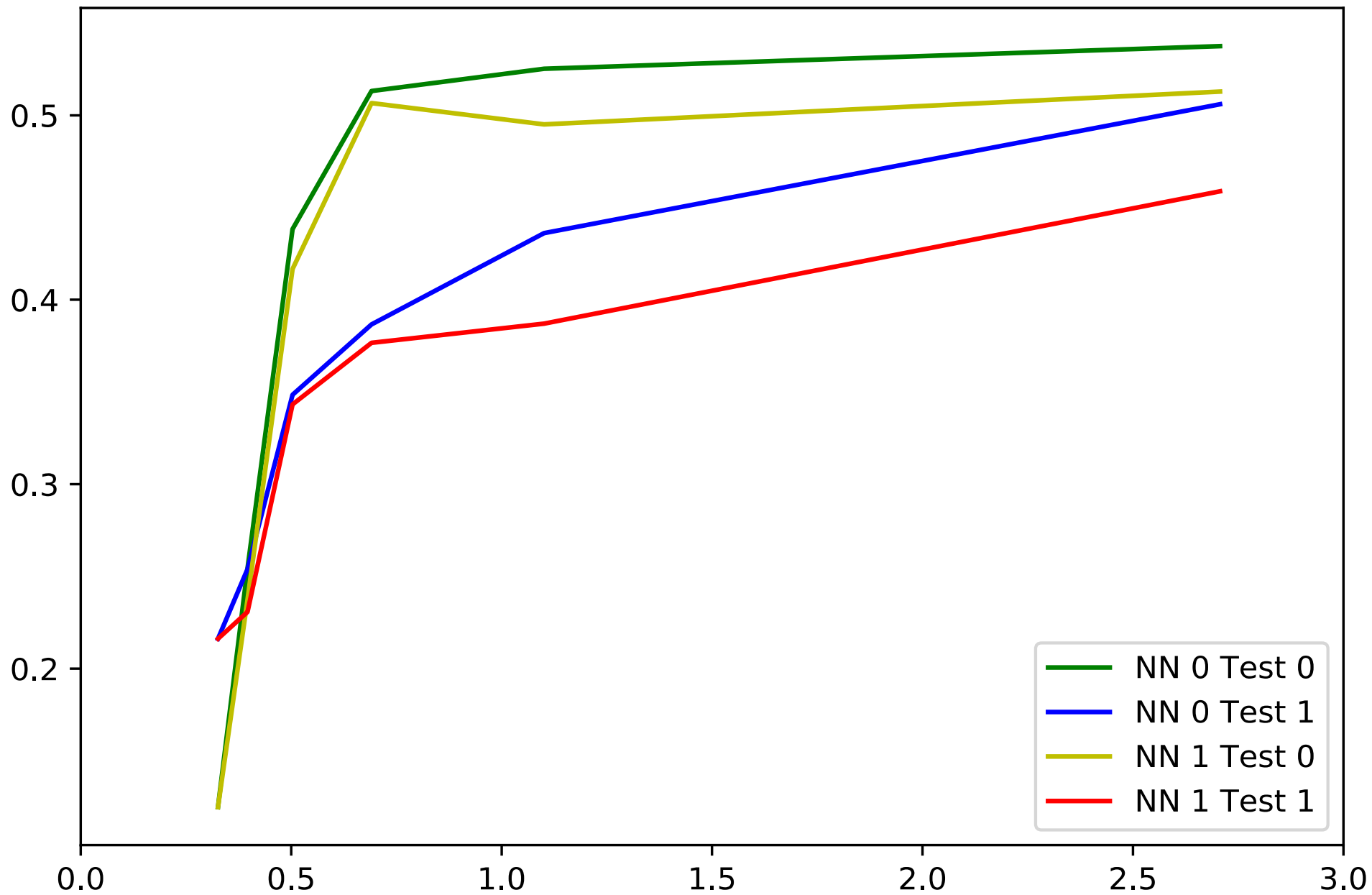
ROC, z trained [-150, 150] cm

z tested [-150, 150] cm



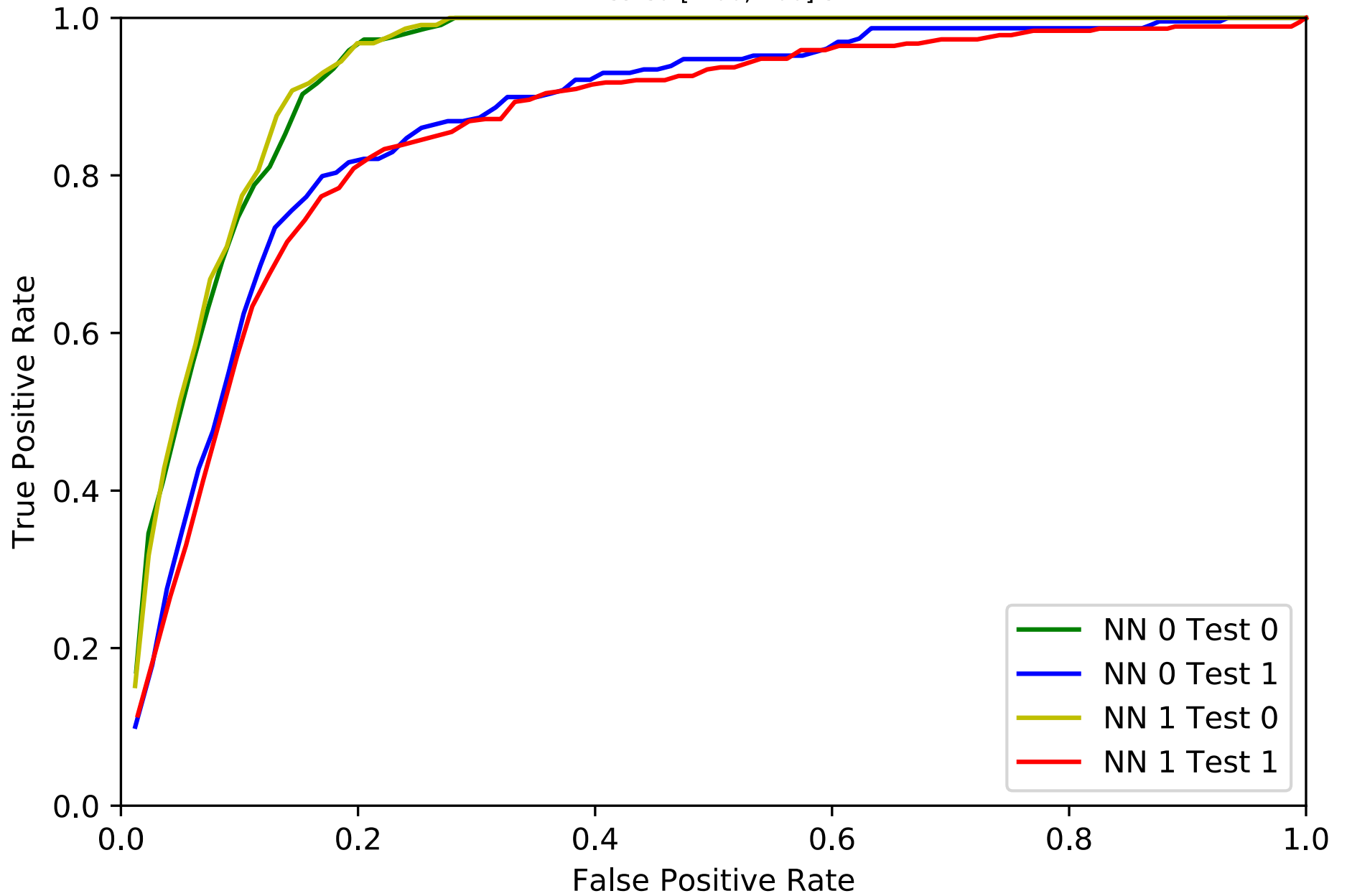
z trained $[-150, 150]$ cm , z tested $[-150, 150]$ cm

P_T -dependent True Positive Rate, $pred_cut = 10$



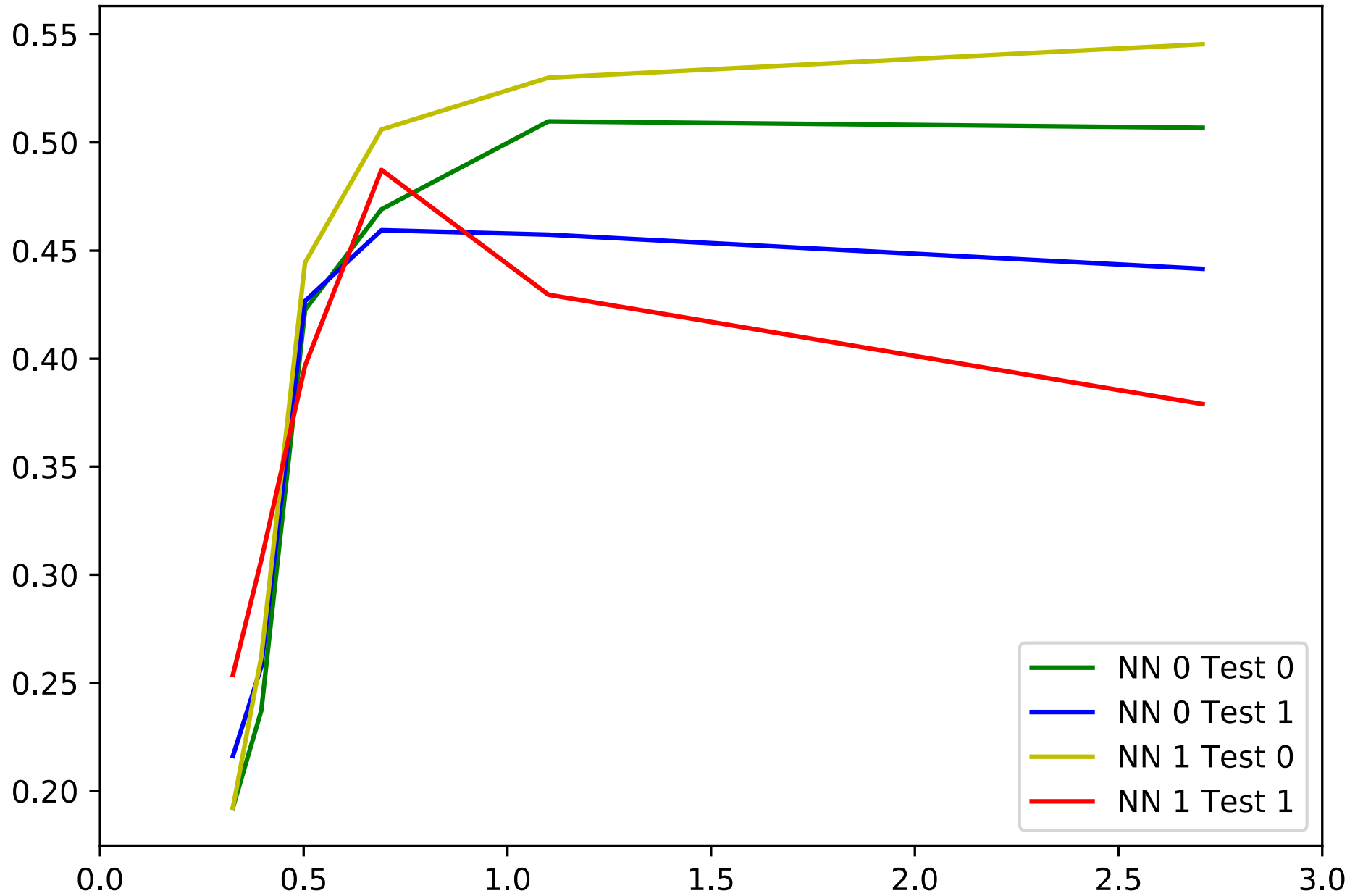
ROC, z trained [-150, 150] cm

z tested [-100, 100] cm



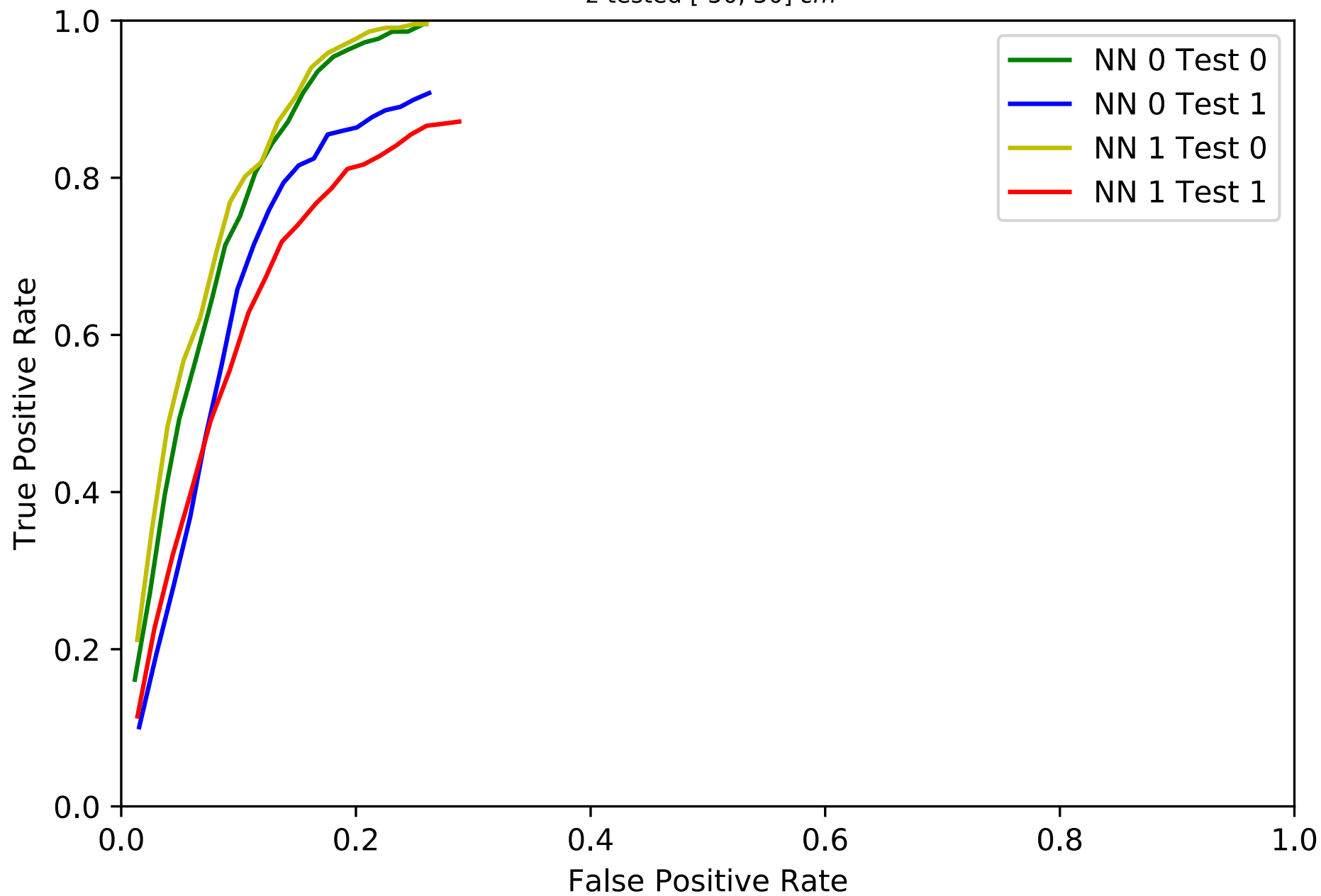
z trained $[-150, 150]$ cm, z tested $[-100, 100]$ cm

P_T -dependent True Positive Rate, pred_cut = 10



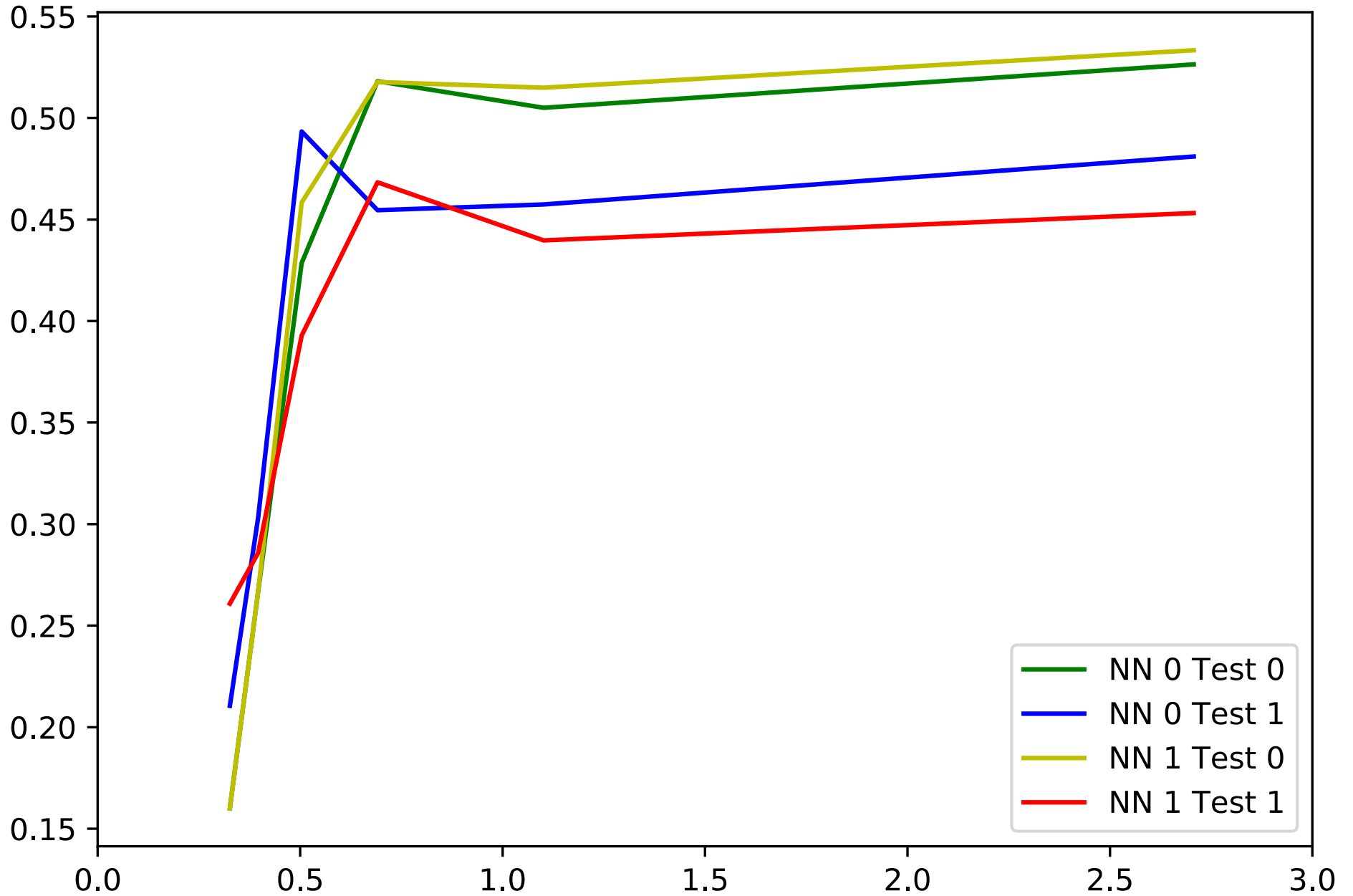
ROC, z trained [-150, 150] cm

z tested [-50, 50] cm



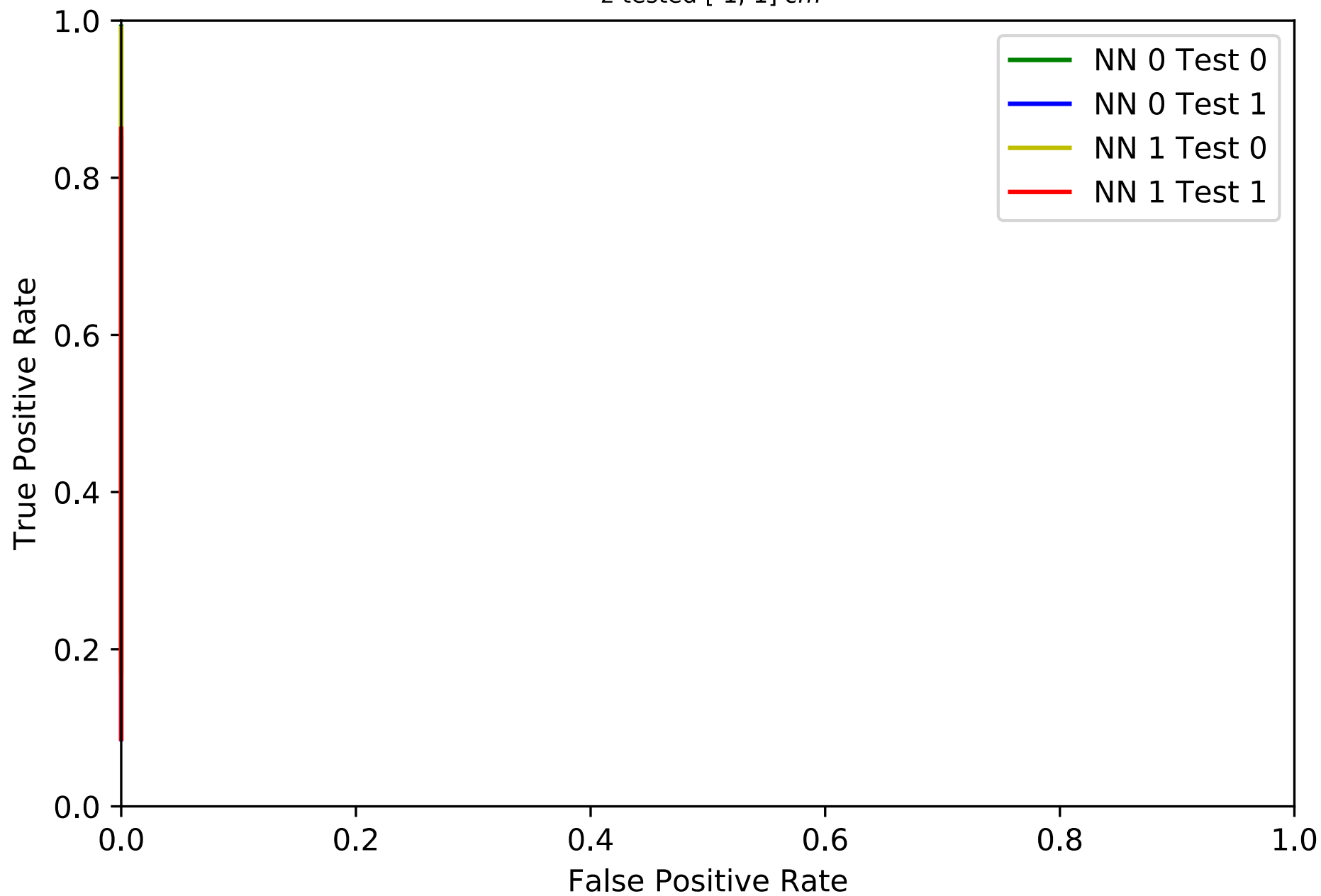
z trained $[-150, 150]$ cm, z tested $[-50, 50]$ cm

P_T -dependent True Positive Rate, pred_cut = 10



ROC, z trained [-150, 150] cm

z tested [-1, 1] cm



z trained $[-150, 150]$ cm , z tested $[-1, 1]$ cm

P_T -dependent True Positive Rate, $pred_cut = 10$

