Test Loss on 2D Knapsack Training Set Size = 1000, Polynomial Degree = 2, Noise Half-width = 0.5 SPO DBB 80 PFYL 70 60  $\stackrel{\text{iff}}{\underset{\text{dof}}{\sum}} 50$ 30 20 10 0.001 0.0 0.01 0.1 1.0 L1 Parameter