Unadaptability in the Scalar Model $f(x, h) = (h^2 - 1)^2 hx + (h^2 - 4)x^2/h^2$ **Pre-Training Loss** Fine-Tuning Loss Loss Landscape 500 500 1000 Pre-train h = 1Initial h = 0.5Initial h = -0.5Fine-tune h = 2400 400 800 SSO-300 300 From h = 0.5600 From h = -0.5MSE 200 200 Loss Gap 400 100 100 200 0 0 200 400 200 400 Fine-Tuning Steps **Pre-Training Steps** Learned Model h