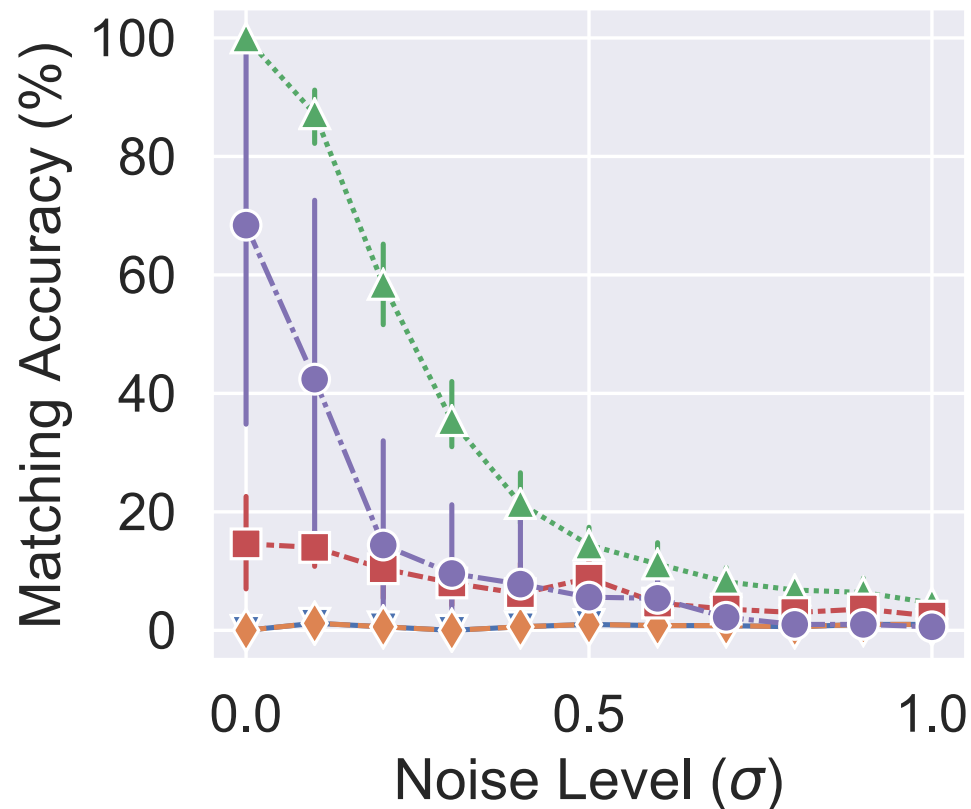
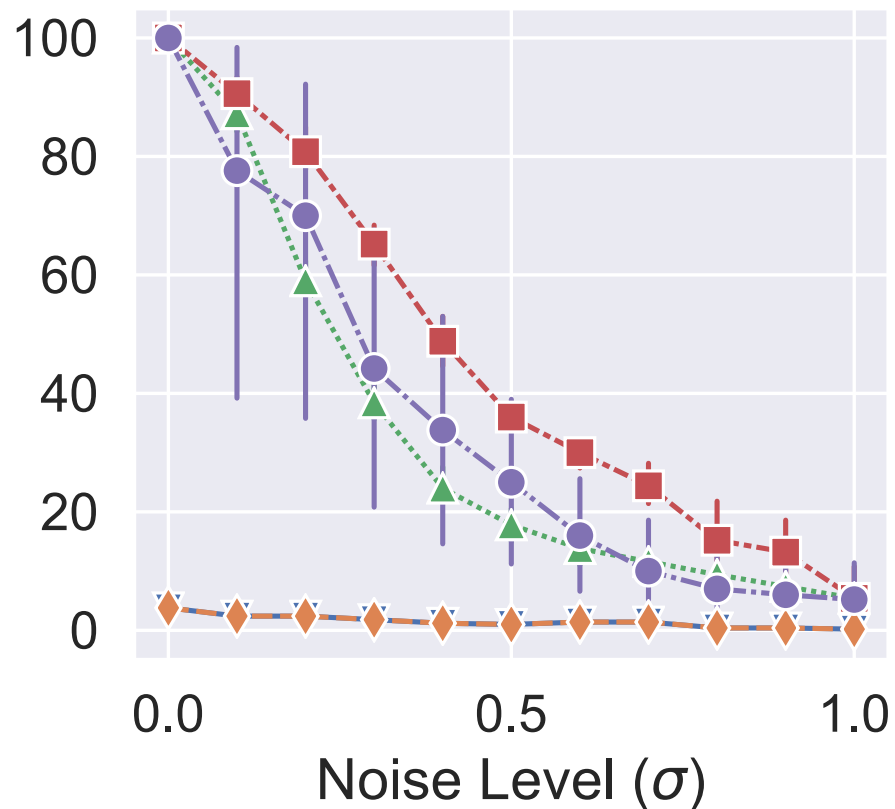
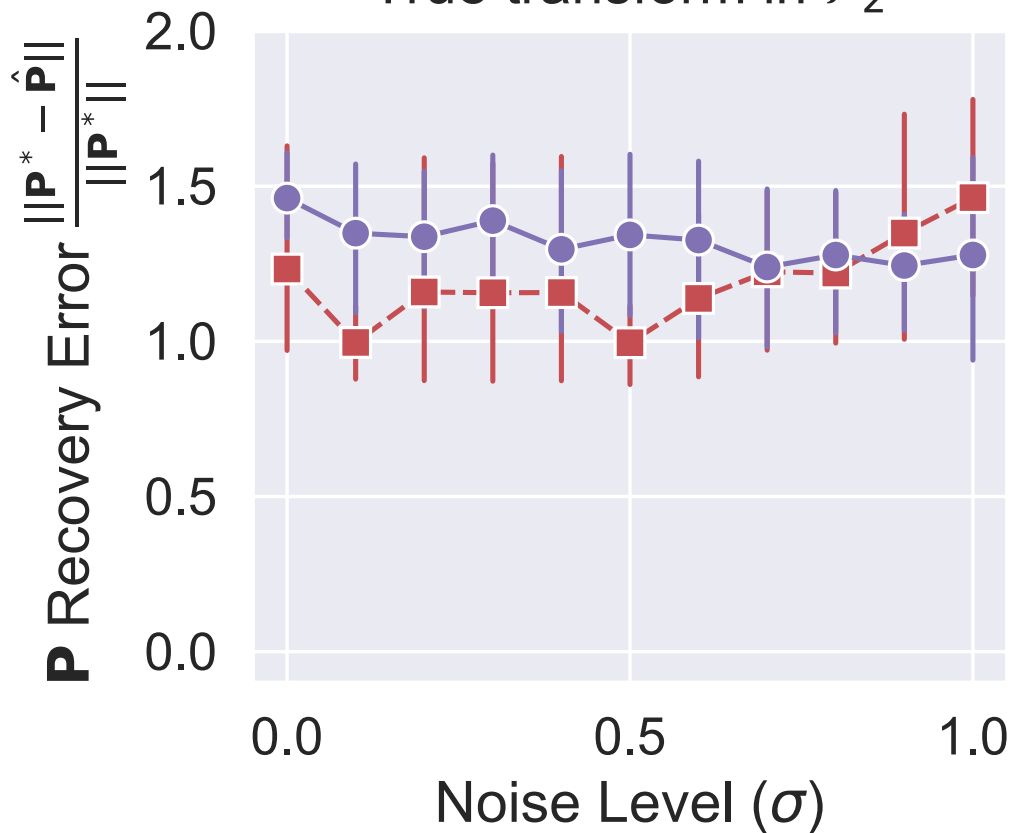
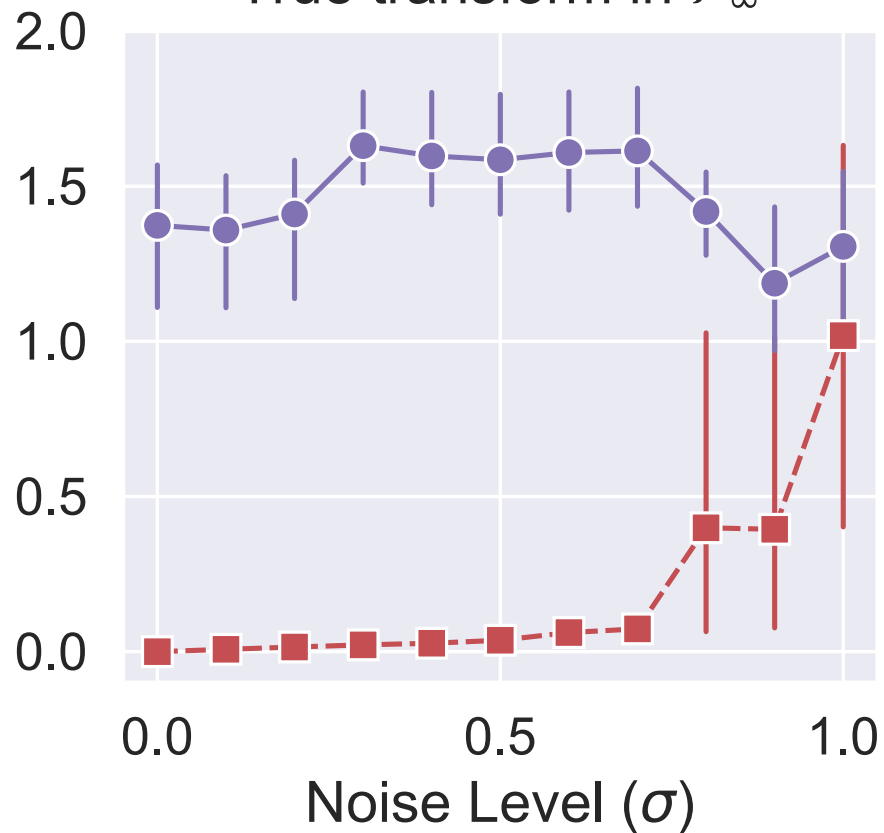




sensitivity to noise and misperception

Invariant not

True transform in \mathcal{F}_2 True transform in \mathcal{F}_∞ True transform in \mathcal{F}_2 True transform in \mathcal{F}_∞ 

Accuracy of recovering true
correspondences from Γ
(higher is better)



Error in recovering true
transformation **P**
(lower is better)



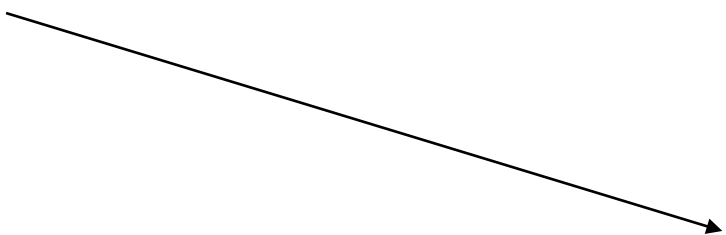
4

3

Oracle: solve OT on data without invariance applied



"absolute best possible"

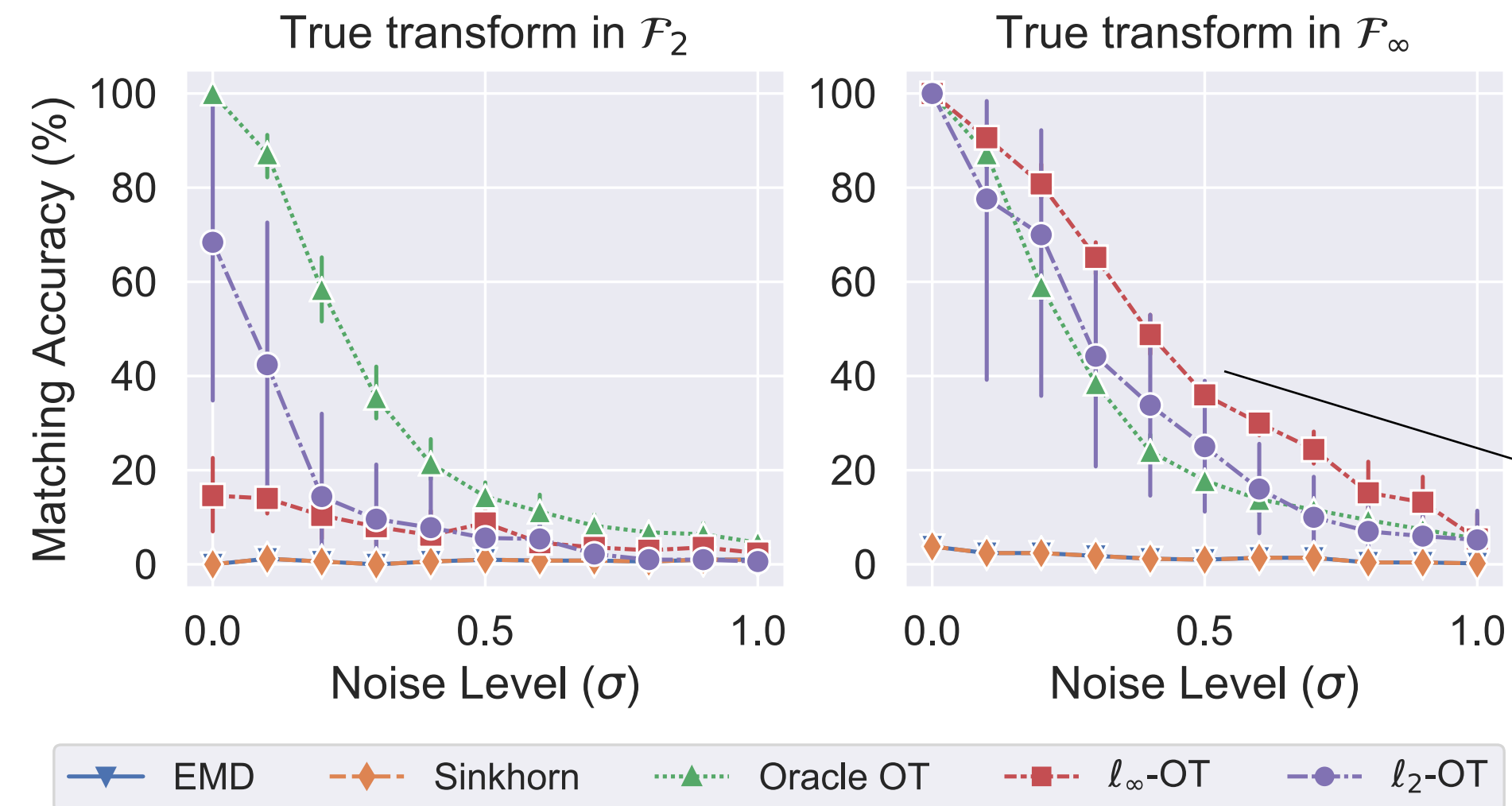


ℓ_2 – Schatten more robust to
invariance misspecification

Invariant OT

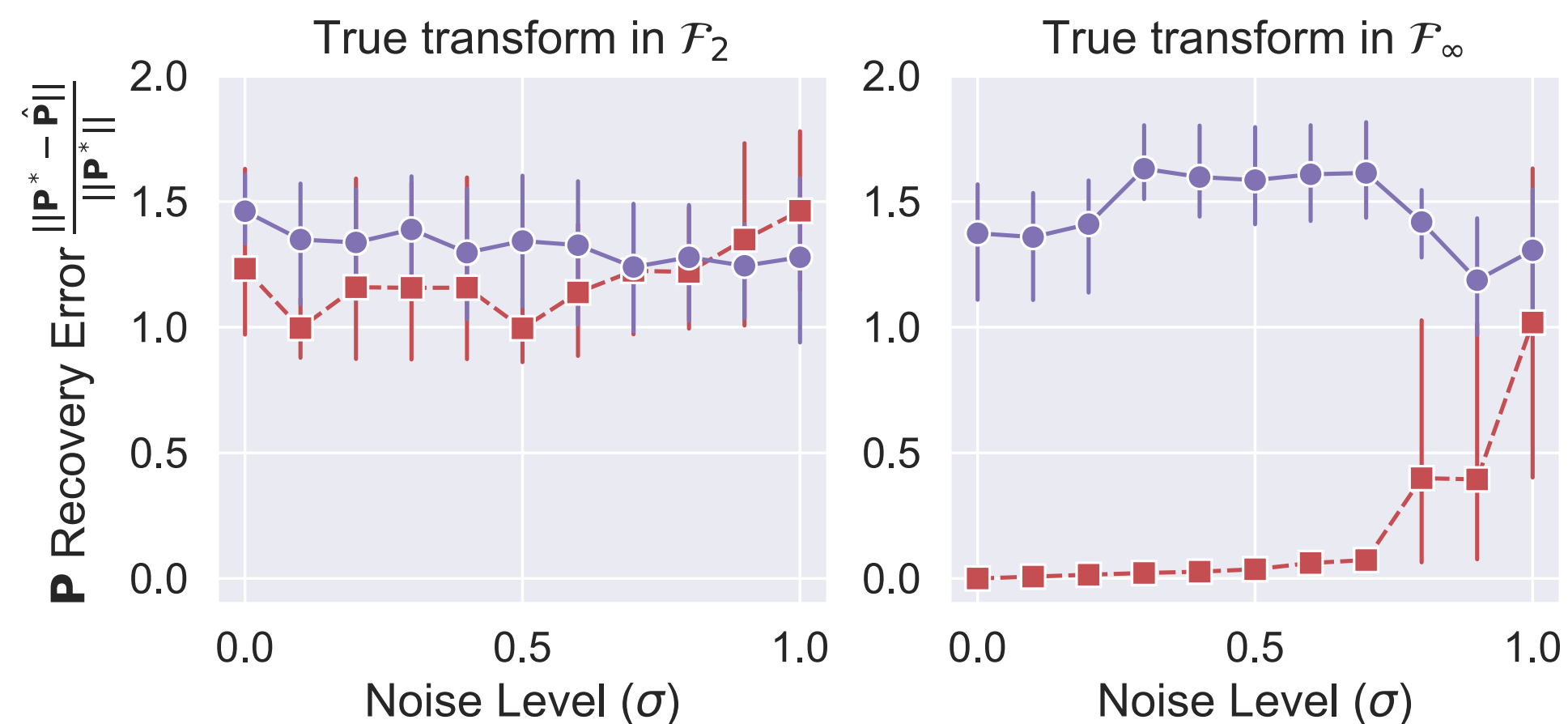
sensitivity to noise and misspecification

Accuracy of recovering true correspondences from Γ
(higher is better)



ℓ_2 - Schatten more robust to invariance misspecification

Error in recovering true transformation \mathbf{P}
(lower is better)



Second Approach: Gromov-Wasserstein distances