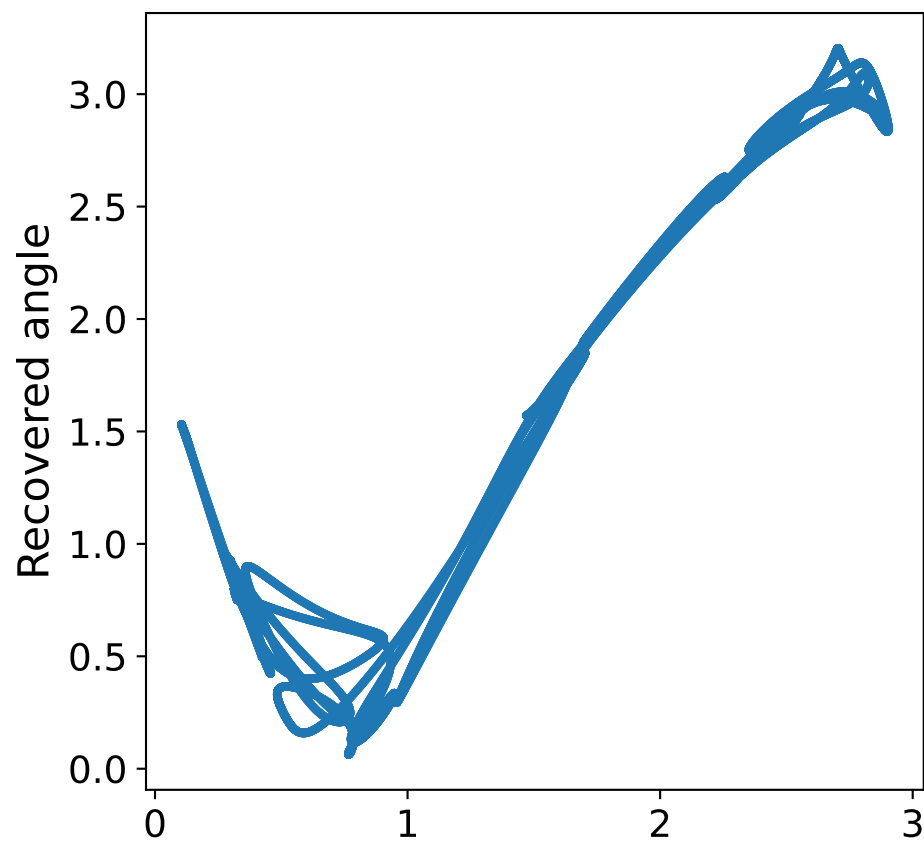
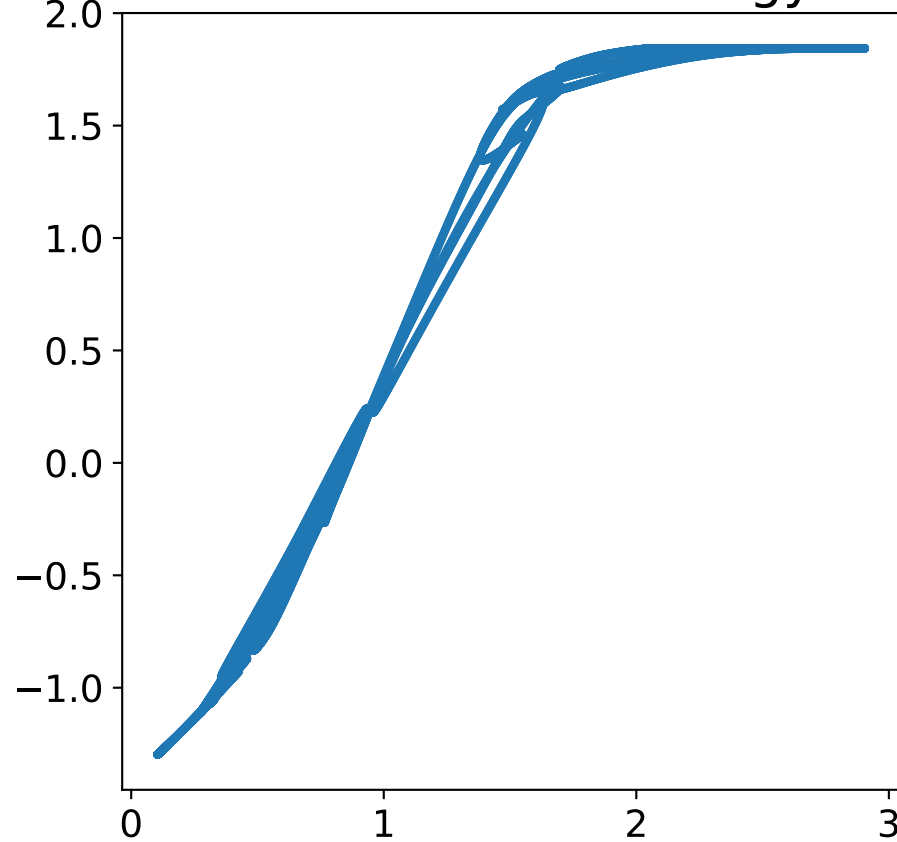
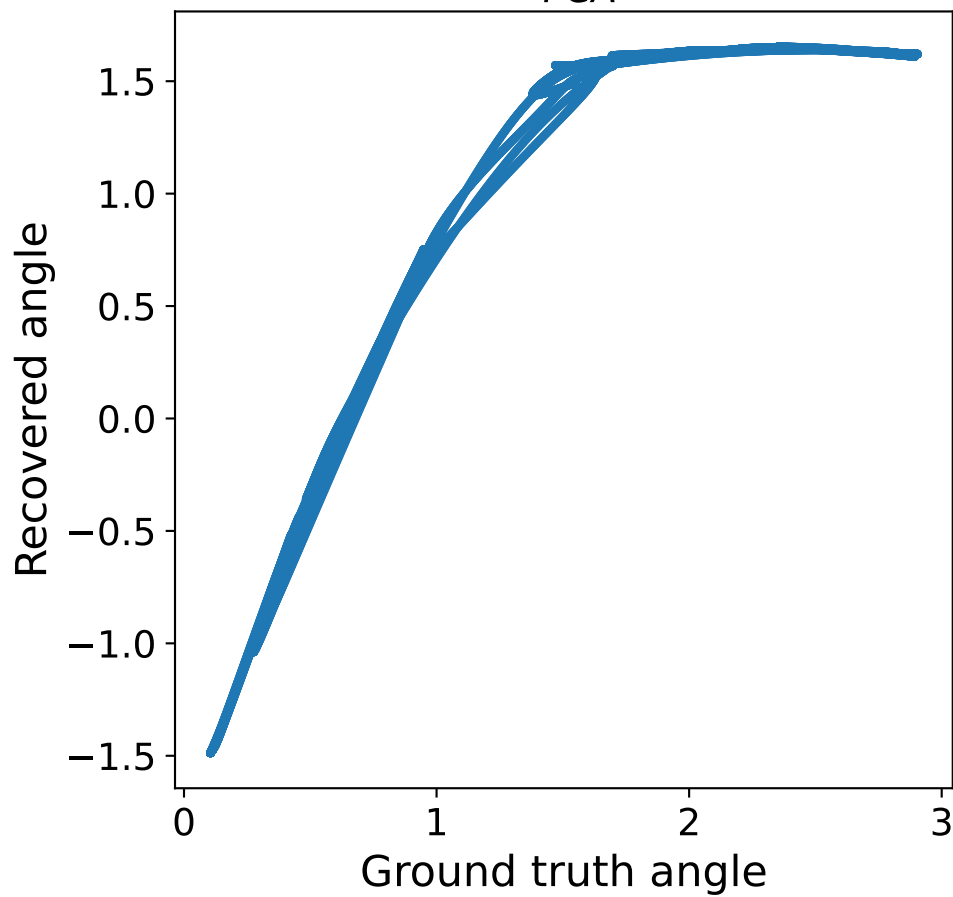


MDS



Persistent cohomology

 $\alpha_{PCA}$  $\alpha_{random}$ 