Neuroanatomical **Data Preprocessing** Contrastive autoencoding **RSA** analyses Analyses ASD data input Data path for Data path for (N=470) ASD brain ASD brain ASD input TD input T1w image in native space Tissue segmentation Extract subject similarity BG space SL space **Gray Matter** White Matter Reconstruction of Full reconstruction TD features only TD reconstruction ASD reconstruction Identification of ASD features TD features ASD brain RSA models Convolutional Shared decoder Brain encoders Tissue Background space Salient space Spatial Subject's brain normalization in Native space TD -> ASD

(3D Volumetric view)