

Extended Data Figure 1 | Models of the velocity fields of COS-3018555981 and COS-2987030247, using a disk model. a–h, Model fits to the velocity gradients in COS-3018555981 (a–d) and COS-2987030247 (e–h), assuming that the gas is rotating in an exponential, circularly symmetric thin disk. a, e, High-resolution disk

model before convolution with the beam;  $\mathbf{b}$ ,  $\mathbf{f}$ , disk model at the resolution of our observations;  $\mathbf{c}$ ,  $\mathbf{g}$ , our velocity maps, as shown in Fig. 3;  $\mathbf{d}$ ,  $\mathbf{h}$ , residuals after subtraction of the model. Although the disk model is not a unique solution for these velocity fields, our galaxies are well described by regular rotation.