$L_2$  Horizontal Lyapunov ( $a_{lt}=0.00, \alpha=0 \text{ rad}$ ) - Numerical continuation verification  $H_{lt}$  evolution  $\alpha$  evolution  $H_{lt}$  [-]  $\frac{3}{2}\pi$ -1.5 $\alpha$  [-] -1.6 $\frac{1}{2}\pi$ -1.7200 400 600 800 200 400 600 1000 1000 1200 1400 800 12001400 orbit Number [-] orbit Number [-]  $a_{lt}$  evolution Spatial and phase evolution  $2\pi$ 0.10 $a_{lt}$  [-] [-], yx0.00200 400 600 800 1200 1400 200 400 600 800 1000 1200 1000 1400 orbit Number [-] orbit Number [-]