LCOs in L-I-H transitions and physics model

(Left) The evolution of $D_{\alpha}$ emission (a) and the Lissajous diagram in the phase space of $e\rho v |E_r|/T_e$ and envelope of density fluctuations (b).

(Right) Sketch of the three plausible loops for the two types of LCOs and I-H transition.

The time evolutions of soft X-ray (a), inverses of the scale lengths of gradients of electron temperature $1/L_{te}$ and density $1/L_{ne}$ (b), and pressure $1/L_{Pe}$ (c), the ion-ion collision frequency $v_{ii}$, growth rate of the diamagnetic drift flow $\gamma_{DD}$ (d), the $E \times B$ flow shearing rate $\gamma_{E \times B}$ and the decorrelation rate of the turbulence $1/\tau_c$ (e) for two shots.