Spontaneous LH transition with suppressed shear flow

- A new analytical and numerical 4-field model for describing $L \rightarrow H$ transitions in weakly collisional ITER-related regimes is developed.

- transitions in collisionless, electron heated regimes where the electron-ion coupling is allowed to be completely anomalous, due to the fluctuation of $\langle \mathbf{E} \cdot \mathbf{J} \rangle$ work on electrons and ions, are studied.

- New transition scenarios, characterized by the sensitivity of transition evolution to pre-existing L-mode profiles are considered (see Figure).