# Drifting cavity solitons and dissipative rogue waves induced by time-delayed feedback in Kerr optical frequency comb and in all fiber cavities

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Time-delayed feedback plays an important role in the dynamics of spatially extended systems. In this contribution, we consider the generic Lugiato-Lefever model with delay feedback that describes Kerr optical frequency comb in all fiber cavities. We show that the delay feedback strongly impacts the spatiotemporal dynamical behavior resulting from modulational instability by (i) reducing the threshold associated with modulational instability and by (ii) decreasing the critical frequency at the onset of this instability. We show that for moderate input intensities it is possible to generate drifting cavity solitons with an asymmetric radiation emitted from the soliton tails. Finally, we characterize the formation of rogue waves induced by the delay feedback.