Lasers are known to have an astounding range of practical and technological applications. Analogously, they can be a powerful instrument to investigate theoretical concepts and ideas. In particular, when an optical driving is applied to an atomic ensemble a coherent dynamics is produced in (some of) the internal degrees of freedom of the atoms. When combined with strong interatomic interactions, the driving can artificially give rise to cooperative effects, where the internal dynamics of an atom becomes dependent on the configuration of the neighbourhood. My talk aims to provide an example where this cooperative dynamics gives rise to non-equilibrium phase transitions, and in particular ones featuring absorbing states, such as the so-called “directed percolation”. This opens a new possibility for investigating these transitions in a quantum coherent setting, highlighting how their nature changes with respect to the classical limit.