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Ultracompact objects with light-rings (LRs) but without an event horizon could mimic black holes (BHs) in their strong gravity phenomenology. But are such objects dynamically viable? Stationary and ax-symmetric ultracompact objects that can form from smooth, quasi-Minkowski initial data must have at least one stable LR, which has been argued to trigger a spacetime instability; but its development and fate have been unknown. Using fully non-linear numerical evolutions of ultracompact bosonic stars free of any other known instabilities and introducing a novel adiabatic effective potential technique, we confirm the LRs triggered instability, identifying two possible fates: migration to non-ultracompact configurations or collapse to BHs. In concrete examples we show that typical migration/collapse time scales are not larger than $\sim 10^3$ light-crossing times, unless the stable LR potential well is very shallow. Our results show that the LR instability is effective in destroying horizonless ultracompact objects that could be plausible BH imitators.

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