The AdS instability conjecture is a conjecture about the initial-boundary value problem in general relativity. It states that there exist arbitrarily small perturbations to the initial data of AdS spacetime which, under evolution by the vacuum Einstein equations with reflecting boundary conditions on conformal infinity, lead to the formation of black holes after sufficiently long time. In this talk, I will present a rigorous proof of the AdS instability conjecture in the setting of the spherically symmetric Einstein–scalar field system. The construction of the unstable family of initial data will require working in a low regularity setting, carefully designing a family of initial configurations of localised matter beams and estimating the exchange of energy taking place between interacting beams over long period of times, as well as estimating the decoherence rate of the beams.