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Slowly evolving horizons and the membrane paradigm[1] IVAN BOOTH, Memorial University — Slowly evolving proxy horizons are a class of geometric objects that include the event, Killing, trapping, isolated, dynamical, apparent and stretched horizons associated with near-equilibrium black holes (and branes). Technically they are a slight generalization of slowly evolving trapping horizons and we show that starting from any such proxy horizon one may (perturbatively) construct nearby event horizon candidates and stretched horizons. We consider the mechanics of these objects as well as apply them to study the non-uniqueness of geometric horizons.

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