Quantum causal histories:
What the universe looks like from the inside

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A quantum causal history is a causal set with Hilbert spaces attached to the causal relations. Evolution is dictated by local unitary operators between these spaces. We describe the properties of such histories. We then require that the only physically meaningful description of a causal history is via observable operators defined from *inside* the history. In the case of classical causal histories, the internal description of a given history is naturally given by a presheaf over the underlying causal set. We discuss the corresponding internal description in the quantum case.