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Singularities and black holes in causal set gravity YU ASATO, UC

Davis — The causal set theory is often considered as the simplest approach to quantum gravity, but this simplicity has made it difficult to precisely define black holes in the theory. I first show that the causal set theory is not so simple as we might think, and still admits continuum. I argue that the continuum behaves like a singularity in a certain sense, and propose the internal definition of black holes in the causal set theory based on the continuum.

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