

Abstract Submitted
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Painleve'-Gullstrand models for time-dependent black holes
TEHANI FINCH¹, JAMES LINDESAY, Howard University — Black hole metrics that contain a timelike Killing vector have well known causal structure, captured by Penrose diagrams. However, the causal structure of time-dependent black holes has only recently received significant attention. Penrose diagrams have now been constructed for models of black holes in Painleve'-Gullstrand coordinates with time-dependent mass parameter. We discuss the constraints on these models and their relation to the dynamical horizon paradigm.

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