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## Linear growth of the two-point function for the Unruh state in 1+1 dimensional black holes

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The two-point function for a massless minimally coupled scalar field in the Unruh state is computed for various examples of 1+1 dimensional black holes. It is found that for spacelike separations of the points the two-point function grows linearly in terms of a time coordinate that is well-defined on the future black hole horizon, and for Schwarzschild-de Sitter black holes is also well-defined on the future cosmological horizon. The two-point function for a massive scalar field in Schwarzschild-de Sitter spacetime is also discussed.

**Primary author:** ANDERSON, Paul (Wake Forest University)

**Co-authors:** Mr SCOFIELD, Zachary P. (Wake Forest University); Prof. TRASCHEN, Jennie (University of Massachusetts, Amherst)

**Presenter:** ANDERSON, Paul (Wake Forest University)

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