Black hole entropy from conformal symmetry on the horizon\(^1\)

STEVEN CARLIP, UC Davis — The idea that black hole entropy might be governed by a conformal symmetry is an old one, but until now most efforts have focused on either asymptotic symmetries or symmetries on a “stretched horizon. For two-dimensional dilaton gravity, I show the existence of a well-behaved conformal symmetry that is on the horizon, with a central charge that correctly determines the black hole entropy.

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