

In this talk, a simple derivation of Bekenstein-Hawking entropy of Schwarzschild black hole from its Hawking radiation will be presented. To this end, it will be shown that if a thermodynamic system loses its energy only through the black body radiation, its loss of entropy is always (approximately) $3/4$ of the entropy of the emitted radiation. This proposition enables us to relate the entropy of an evaporating black hole to the entropy of its Hawking radiation.

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