

A cosmological black hole forming in a cosmological context will be subject to a flux of infalling matter and radiation, which will cause the outer apparent horizon to be spacelike. Tunneling calculations of the emission of Hawking radiation then indicate that no blackbody radiation is emitted to infinity by the black hole in these circumstances, hence there will also then be no black hole evaporation process due to emission of such radiation as long as the matter flux is significant. The essential adiabatic condition (eikonal approximation in tunneling black hole) for black hole radiation gives a strong limit to the black holes that can emit Hawking radiation. I give the mass range for the black holes that can radiate, according to their cosmological redshift, for the special case of the cosmic blackbody radiation (CBR) influx and we consider its effect on the primordial black hole radiation.