

# **Thermoelectric Conductivity and Stokes Flows on Black Hole Horizons**

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In seeking applications of holography to real materials the thermoelectric conductivity is an important observable to study. We show that the DC conductivity can be obtained, quite generally, by solving a generalised set of Stokes equations for a charged incompressible fluid on the black hole horizon. For certain classes of black holes these equations can be explicitly solved.