Could black hole thermodynamics play a role in black hole mergers?

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Gravitational waves detected from binary black hole mergers by the LIGO/Virgo/KAGRA collaboration yield values for both the black hole remnant mass M and it's spin "a", with the 169 a values collected so far crowding significantly around their average 0.6869±0.0135. Could this crowding relate directly to the Davies phase transition point at a=0.68125 from black hole thermodynamics? I argue that a necessary challenge for such a connection to obtain requires a consistent application of the thermodynamic fluctuation theory that follows from black hole thermodynamics (BHT). Specifically, necessary are a correct choice of fluctuating variables, as well as thermal equilibrium between the event horizon at the Hawking temperature $\sim 1\mu K$ and the outside universe $\sim 3K$. I show that the former requirement follows in straightforward fashion from the BHT of the Kerr model, while the later requires an accretion disk following the Novikov-Thorne accretion disk model. I construct a thermodynamic fluctuation theory meeting both these requirements. My results open the possibility that black hole mergers are based on some dynamical model (not known to me) with a limiting attractor state at the Davies point.