On the Interpretation of Action as Entropy JOHN HALLER[1], None
— I present a governing hypothesize that self-information (in natural units) is equal
to the integral of energy times time divided by the quantum of action. I solve for
both the free particle case and for when the particle is in a potential and conclude
that the principle of least action is a similitude of the 2nd law of thermodynam-
ics. I show supporting examples including the two slit experiment, the minimum
uncertainty Gaussian wave function, and the electron spin state and argue that a
spin s particle is 2s+1 natural units of information. I share a history of these con-
cepts and how thinking has evolved over the last 100+ years. Lastly I present how
this hypothesis is able to reconcile the Bohemian and Copenhagen interpretations
of quantum mechanics and shed light on the non-local debate.

[1]The inspiration for the hypothesis was found as an undergrad at Princeton and the
initial development was done as a grad student at Stanford.

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None