Loss of temperature during fast heating

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Abstract

If we subject a Gibbs measure at temperature T to a stochastic evolution of Glauber type for which a Gibbs measure T' is reversible, this is supposed to model a fast change in temperature. When T is much larger than T', this is the process of quenching. We present some results about the "unquenching" regime, in which T' is much larger than T. We discuss under what conditions at finite times (so in the transient regime) the evolved measure is or is not a Gibbs measure for some effective interaction.

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