A local hidden variable theory for the GHZ experiment

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Abstract

A recent analysis by de Barros and Suppes of experimentally realizable
GHZ correlations supports the conclusion that these correlations
cannot be explained by introducing local hidden variables. We show,
nevertheless, that their analysis does not exclude local hidden
variable models in which the inefficiency in the experiment is an
effect not only of random errors in the detector
equipment, but is also the manifestation of a pre-set, hidden
property of the particles ("prism models"). Indeed, we present an
explicit prism model for the GHZ scenario; that is, a local hidden
variable model entirely compatible with recent GHZ experiments.

Keywords:	local hidden variable, GHZ experiment, detection efficiency, prism model
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