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When is a model a good model?

(after-dinner talk)

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In the study of strongly correlated systems in condensed matter physics we often deal with 'models' that are supposed to capture the essential physics of interest. Usually much more time and effort is spent in discussing the properties of a model than on whether the model itself is a good model. I will touch briefly on the reasons for that, and why it may not be healthy. I will discuss novel criteria to assess whether a model is a good model and discuss several examples, hopefully controversial.