Title:	Revisiting the admissibility of non-contextual hidden variable models in quantum mechanics
Authors:	Arora, A.S. (/jspui/browse?type=author&value=Arora%2C+A.S.) Arvind (/jspui/browse?type=author&value=Arvind)
Keywords:	Quantum contextuality HV models
Issue Date:	2019
Publisher:	Elsevier
Citation:	Physics Letters, Section A: General, Atomic and Solid State Physics, 383(9),pp. 833-837.
Abstract:	We construct a non-contextual hidden variable model consistent with all the kinematic predictions of quantum mechanics (QM). The famous Bell–KS theorem shows that non-contextual models which satisfy a further reasonable restriction are inconsistent with QM. In our construction, we define a weaker variant of this restriction which captures its essence while still allowing a non-contextual description of QM. This is in contrast to the contextual hidden variable toy models, such as the one by Bell, and brings out an interesting alternate way of looking at QM. The results also relate to the Bohmian model, where it is harder to pin down such features.
Description:	Only IISERM authors are available in the record.
URI:	https://www.sciencedirect.com/science/article/pii/S0375960118311952 (https://www.sciencedirect.com/science/article/pii/S0375960118311952) http://hdl.handle.net/123456789/2200 (http://hdl.handle.net/123456789/2200)
Appears in Collections:	Research Articles (/jspui/handle/123456789/9)

Files in This Item:

File	Description	Size	Format	
Need to add pdf.odt (/jspui/bitstream/123456789/2200/1/Need%20to%20add%20pdf.odt)		8.63 kB	OpenDocument Text	View/Open (/jspui/bitstream/12345

Show full item record (/jspui/handle/123456789/2200?mode=full)
(/jspui/handle/123456789/2200/statistics)