A Relative Frequency Criterion for the Repeatability of Quantum Measurements.

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PACS 03.65.Bz – Quantum mechanics; quantum measurements. PACS 99.10 – Errata.

On p. 1104, 1st line from below, the expression

$$P(X_i = 1, X_j = 1) = p$$

should read

$$P(X_i = 1, X_i = 1) = p$$
.

On p. 1105, 11th and 12th line from below, the expression

$$[p-\eta \Delta p, p-(\Delta p)'' \cup (p+(\Delta p)'', p+(\Delta p)'']$$

should read

$$[p - \eta \Delta p, p - (\Delta p)'') \cup (p + (\Delta p)'', p + (\Delta p)''].$$

On p. 1107, 6th line from above, the expression

$$[p-(pq)^{1/2}N^k, p-(pq)^{1/2}N^n) \cup (p+pq)^{1/2}N^n, p+(pq)^{1/2}N^k],$$

should read

$$\left[p-(pq)^{1/2}N^k,\ p-(pq)^{1/2}N^n\right)\cup \left(p+(pq)^{1/2}N^n,\ p+(pq)^{1/2}N^k\right].$$

On p. 1110, 11th line from below, «possibilities» should read «possibilities».

On p. 1110, 4th line from below, «and given» should read «and is given».

Due to a technical incovenience, on p. 1109 the last two lines are doubled; and on p. 1110, 1st line from below:

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Thus we reach the conclusion that quantum YES-NO measurements of the disshould read:

Thus we reach the conclusion that quantum YES-NO measurements of the discrete spin observables considered is repeatable with respect to individual measured systems, if and only if G(p) is jump discontinuous in the sense of point 3 above.

In general, for spin s and its projection m we have $p = p_{mm}^s = (\delta_{mm}^s)^2$, where δ_{mm}^s is an element of the rotation matrix. It is not difficult to show that $G(p_{mm}^s)$ has a finite

We sincerely apologize to the author.

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