

Addendum

Fuller, W., Lenard, A.: Generalized Quantum Spins, Coherent States, and Lieb Inequalities. Commun. Math. Phys. **67**, 69–84 (1979)

We regret an oversight to which Professor Barry Simon drew our attention. The gap occurs in the proof of Proposition 5 which requires establishing that the L_{jk} are proportional to the T_{jk} . The argument, as it stands is incomplete; we have failed to show that the constant k defined by (4.11) does not vanish.

This can be done as follows:

Using (2.5), (2.6), and (3.23) one obtains that k is a positive multiple of $\int X(Y+X)^l dR$ where the integral is over the full orthogonal group and where $X = \det(r)$, $Y = \frac{1}{2} \text{trace}(r^t r)$ with r the upper left 2 by 2 submatrix of R . By a suitable group translation in the integration variable one can change the sign of X without affecting Y . If the two expressions are then added, the odd powers of X cancel and k appears as a manifestly positive number.