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On the Einstein, Podolsky and Rosen (EPR) Experiment KENNETH SCHATTEN[1], ai-Solutions — I discuss Bohm's version of the Einstein, Podolsky, Rosen (EPR) experiment. Bell analyzed the Bohm-EPR statistics in which two spin one half particles originate from a zero spin state. He asserted that the quantum statistics required "non-local hidden variables." Quantum Field Theory (QFT) portrays electrons (and positrons) as having a bare core, surrounding which is a "dressing," consisting of one or more particles pulled from the vacuum when electrons are freed from their bound state. Until a particle undergoes an interaction, it retains its properties, including its dressing acquired during its parturition. The most easily acquired dressing for an electron would be an EM virtual photon. This would serve to inhibit charged particle Bremsstrahlung. Using the QFT paradigm, I developed a Monte-Carlo computer algorithm to examine the statistics of randomly oriented dressings, assuming the dressing had a vector quality, such as the E-M Poynting vector. The numerical results compare well with experiments. This begs the question as to the role that particle dressings play in QM/QFT probabilistic behaviors. The author dedicates this paper to Abner Shimony, who delighted in this subject.

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