Abstract Submitted for the TSS06 Meeting of The American Physical Society

Is Quantum Mechanics Nonlocal? JAMES ESPINOSA — It has been accepted generally that as a result of experiment confirming the breaking of Bell's inequality that the world as described by quantum mechanics is nonlocal. We show that this is not the case. Bell's inequality is based on the introduction of hidden variables. We believe that it must be a requirement that only a probabilistic method can be used to decide whether or not quantum mechanics is local or nonlocal. We supply necessary and sufficient conditions for locality.

James Espinosa Texas Woman's University

Date submitted: 03 Mar 2006

Electronic form version 1.4