

Abstract Submitted
for the TSF06 Meeting of
The American Physical Society

Sorting Category: 11.0 (T)

Is Quantum Mechanics Nonlocal? JAMES ESPINOSA,
Texas Woman's University — The formalism of Quantum Mechanics
can be used to predict eigenvalues and probabilities. So, whether this
formalism requires the quantum world to be local or non local should be
expressible in probabilistic terms and without the introduction of, so-
called, hidden variables. Local or not should be expressible within the
theory itself. This would mean that Bell's inequality is in fact empty of
physical implications for the quantum theory. We put forth a necessary
condition for the quantum theory of the decay of two-spin bound states
to be local and find that this condition is satisfied by these systems.

Prefer Oral Session
 Prefer Poster Session

James Espinosa
cjespinosa@peoplepc.com
Texas Woman's University

Date submitted: 07 Sep 2006

Electronic form version 1.4