Physics Department Seminar

Friday March 24th, 2006

11:00am in PhSc 105

"Non-locality and Relativity"

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In 1982, Aspect showed that Bell's inequality was violated. While there has not been consensus about what the consequences of this result are, it is generally agreed that it showed that at least some interactions are non-local—in other words, there are space-like separated events that are not independent of each other. If such is the case, then a challenge is presented to the theory of relativity. We will explore the nature of this challenge, and what it means for the interpretation of special relativity.

