

**Physics 002B**

**Assignment #10**

**Quantum Theory in Search of Reality**

**Thursday March 29**

**Seminar Topic: Bell, Einstein and EPR**

**Seminar Break: Joyce/Patricia**

**Readings for presentations:**

**Boccio ---- Chapter\_13 Sections 13.5.6-13.5.10 (pages 503-518)**

**Chapter\_14 Section 14.1 (pages 525-539)**

**Presentations:**

Sections 13.5.6(pages 503-506) John Bell and Bohm's EPR	_Darien_
Section 13.5.7(pages 506-508) Bell's Formula	_Rose_
Section 13.5.8(pages 508-510) Aspect's Experiment	_Lily_
Section 13.5.9(pages 510-511) Implications	_Joyce_
Section 13.5.10(pages 511-518) Bell's Theorem _ Alternate Presentation	_Rita_
Section 13.6(pages 518-524) Density Operator	_Professor_
Section 14.1(pages 525-526) The photon source	_Max_
Section 14.1(pages 526-529) The experiment - part 1	_Joseph_
Section 14.1(pages 528-529) The experiment - part 2	_Yared_
Section 14.1(pages 529-533) Digression on Mach-Zehnder	_Patricia_
Section 14.1(pages 534-539) The experiment - part 3	_Amelia_