Physics 002B In Search of Quantum Reality 1st-Year Seminar
Assignment #7 Tuesday October 20, 2009

Seminar Topic: Polarization and Collapse

Seminar Break: _____
Readings: Boccio ---- 10_Polarization(URL in email)
11_Collapse(URL in email)
Herbert --- Chapter 08 And Then a Miracle Occurs
Seminar will consist of:
(1) Presentations by students
(2) Mini-Lectures by instructor to help with understanding of more difficult ideas as they arise during the seminar

Each student should become an **expert** in their own part of the readings so that their presentation(10 minutes using a Document camera) can be both **informative and interesting. Everyone** should do **ALL** the readings so everyone can **assume** that other seminar participants have at least read the material they will be presenting, even though they may not have fully understood it and/or put it into a general context. The **goal** of each seminar is that everyone **fully understand** all then readings for each week, including all of the **implications and ramifications.**

Presentations:

Boccio

10_Polarization

Pages 01-09	Setting Things Up		_____
Pages 09-15	The Dilemma		_____
Pages 15-28	Explaining Polaroids		_____
Pages 28-33	Quantum Theory and Bases	_____	&_Professor_
Pages 33-38	Angular Momentum	_____	&_Professor_
Pages 38-40	States and Amplitudes	_____	&_Professor_
Pages 40-45	Amplitudes/Probabilities	_____	&_Professor_
Pages 45-58	Density Operators	_____	&_Professor_
Pages 48-55	Density Operators Redux	_____	&_Professor_
Pages 55-60	Polarization State Evolution	_____	&_Professor_

11_Collapse _____&_Professor_

Herbert --- Chapter 08 _____