

Course Plan: The Development of Quantum Theory

Stefanie Russ, Sommer Term 25,
Tuesdays 10-12 a.m.

No.	Date	Topic	Available/Assigned
1.	15.4.	Introduction	-
2.	22.4.	Introduction	-
3.	29.4.	The Copenhagen Interpretation / Schrödinger's Cat	
4.	6.5.	Schrödinger (First Communication)	
5.	13.5.	Schrödinger (Second Communication)	
6.	20.5.	Heisenberg's Matrix Approach	
7.	27.5.	Heisenberg, Born, and Jordan	
8.	3.6.	Equivalence of Heisenberg's and Schrödinger's Approaches	
9.	10.6.	The Einstein-Podolsky-Rosen (EPR) Paradox	
10.	17.6.	Bell's Inequality	
11.	24.6.	To be announced *	
12.	1.7.	To be announced *	
13.	8.7.	To be announced *	
14.	15.7.	Summary, Outlook, and Evaluation	-

* Possible Topics:

C. H. Bennett et. al.: *Teleporting an Unknown Quantum State via Dual Classical and Einstein-Podolsky-Rosen Channels*

A. Einstein: *On the Quantum Theorem of Sommerfeld and Epstein*
(First hint at quantum chaos)

Women in Quantum Physics