

PHYSICS 514 – – FALL 2015

Current Research Instruments

Lecture: T θ – 10:00 - 11:20
 Room: Physics - PP-*****
 as of July 28, 2015, subject to change

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Week # Monday date	Tuesday	Thursday	Homework
I 8/24	Intro & Vacuum I (Metcalf)	Vacuum II (Metcalf)	
II 8/31	Vacuum III (Metcalf)	Feedback and Control (Metcalf)	
III 9/7	Signals and Noise (Metcalf)	Accelerators (Metcalf)	
Everything below here is just a space holder. Dates will be changed.			
IV 9/14	Our Tandem (Lefferts)	Tour of Accelerator (Lefferts)	Feedback & Control papers due Tuesday
V 9/21	Electromagnetic Cloaking (Nils Feege)	TBA	
VI 9/28	Modern Accelerator Physics (Litvinenko)	Temperatures High and Low (Metcalf)	
VII 10/5	Liquefying Helium (Graf - room A-133)	Low Temperature Techniques (Du)	Nuclear and accelerator papers due Tuesday
VIII 10/12	Optical Instruments & Lasers (Metcalf)	Atomic Structure (Metcalf)	
IX 10/19	Tour Helium Liquefier (Lefferts)	Stabilized and tunable Lasers (Metcalf)	Low temp papers due Thursday
X 10/26	Quantum Information (Figuroa)	Ultrafast (Weinacht)	
XI 11/2	Semiconductor Lasers Frequency Combs Precision Spectroscopy	Tour of Laser Labs & Laser Teaching Center also Microscopy (Quinn)	
XII 11/9	Tour of Laser Labs & Laser Teaching Center also Microscopy (Quinn)	Microscopy (Dawber)	Lasers and Optical papers due Tuesday
XIII 11/16	Introduction to X-rays (Metcalf)	Synchrotron Radiation (Metcalf)	
XIV 11/23	Deformable Mirrors Astronomical Instruments (Walter)	Thanksgiving NO CLASS	Microscopy papers due Tuesday
XV 11/30	Detectors at RHIC, EIC, and PHENIX (Hemmick)	The ATLAS detector (Hobbs)	

(Required Statement)

Each student must pursue his or her academic goals honestly and be personally accountable for all submitted work. Representing another person's work as your own is always wrong. Any suspected instance of academic dishonesty will be reported to the Academic Judiciary. For more comprehensive information on academic integrity, including categories of academic dishonesty, please refer to the academic judiciary website at <http://www.stonybrook.edu/uaa/academicjudiciary/>