

PHYSICS 514 – – FALL 2012

Current Research Instruments

Lecture: T θ – 10:00 - 11:20
 Room: Physics - S-265
 as of August 14, 2012, subject to change

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| Week # Monday date | Tuesday | Thursday | Homework |
|--------------------------|---|--|--|
| I 8/27 | Intro & Vacuum I (Metcalf) | Vacuum II (Metcalf) | |
| II 9/3 | No class | Vacuum III (Metcalf) | |
| III 9/10 | Feedback and Control (Metcalf) | Signals and Noise (Metcalf) | |
| IV 9/17 | CLASS CANCELLED | Accelerators (Metcalf) | Feedback & Control papers due Thursday |
| VI 10/1 | Our Tandem (Metcalf and Lefferts) | ¹⁴ C Dating (Hemmick) | |
| V 10/1 | Tour of Accelerator (Lefferts) | Atomic Structure (Metcalf) | Nuclear and accelerator papers due Thursday |
| VII 10/8 | Optical Instruments & Lasers (Metcalf) | Stabilized and tunable Lasers (Metcalf) | |
| VIII 10/15 | Ultrafast (Weinacht) | Ultracold (Schneble) | |
| IX 10/22 | Tour of Laser Labs & Laser Teaching Center | Temperatures High and Low (Metcalf) | Lasers and Optical papers due Thursday |
| X 10/29 | Liquefying Helium (Graf) | Tour Helium Liquefier (Lefferts) | |
| XI 11/5 | Low Temperature Techniques (Du) | Advanced Technology Lab (Davis) | Low temp papers due Thursday |
| XII 11/12 | Microscopy (Dawber) | Microscopy (Quinn) | |
| XIII 11/19 | | Thanksgiving NO CLASS | Microscopy papers due Tuesday |
| XIV 11/26 | Introduction to X-rays (Metcalf) | Synchrotron Radiation (Metcalf) | |
| XV 12/3 | RHIC and PHENIX (TBA) | The ATLAS detector (TBA) | X-ray papers due Thursday |

(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/>