

NSSC Summer School in Nuclear Analytical Techniques

UC Davis, June 25 - July 6, 2012

Date	Location	Person	Inst.	Topic	
Monday, June 25					
8:00	Room 185 Physics			Coffee	
8:30	Room 185 Physics	Mani Tripathi	UCD	Introduction/Welcome	
8:45	Room 185 Physics	Rick Norman	Berkeley	Overview of the NSSC Program	
9:30	Room 185 Physics	George Anzelon	LLNL	Nuclear Non-Proliferation: Policy Perspective-I	
10:15				Coffee Break	
10:30	Room 185 Physics	Dan Cebra	UCD	Basic Nuclear Physics: nuclear gamma decay	
11:15	Room 185 Physics	Adam Bernstein	LLNL	Nuclear Science and Security: Interconnections	
12:00	Segundo Dining Hall			Lunch	
13:30	Counting Lab	Mock/Grant	UCD	Intro to NAA and Sample Prep	Group A/B
13:30	MNRC	Mock/Grant	UCD	Depart for MNRC tour and Intro to Ge counting	Group C/D
16:30				Leave for Davis	
Tuesday, June 26					
8:00	Room 185 Physics			Coffee	
8:30	Room 185 Physics	Bob Svoboda	UCD	Basic Nuclear Physics: alpha & beta decay	
9:30	Room 185 Physics	George Anzelon	LLNL	Nuclear Non-Proliferation: Policy Perspective-II	
10:30				Coffee Break	
10:45	Room 185 Physics	Marco DiCapua	NNSA	Gamma and Neutron Radiation Detectors - I	
11:45	Room 185 Physics	Speakers		Discussion	
12:15	Segundo Dining Hall			Lunch	
13:30	Counting Lab	Mock/Grant	UCD	Intro to NAA and Sample Prep	Group C/D
13:30	MNRC	Mock/Grant	UCD	Depart for MNRC tour and Intro to Ge counting	Group A/B
16:30				Leave for Davis	
19:00	Memorial Union	Dan Cebra		Bowling Night	
Wednesday, June 27					
8:00	Room 185 Physics			Coffee	
8:30	Room 185 Physics	Marco DiCapua	NNSA	Gamma and Neutron Radiation Detectors - II	
9:30	Room 185 Physics	Bob Svoboda	UCD	Scintillation and Solid State Detectors	
10:30				Coffee Break	
11:00	Room 185 Physics	Tom Kulp	Sandia	Basics of Remote Sensing	

11:45	Room 185 Physics	Speakers		Discussion	
12:15	Segundo Dining Hall			Lunch	
13:00				Groups A/B depart for MNRC	
13:30	MNRC	Mock/Grant	UCD	Calibrate Ge detectors	Group A
13:30	MNRC	Mock/Grant	UCD	Expose Sample	Group B
15:00	MNRC	Mock/Grant	UCD	Calibrate Ge detectors	Group B
15:00	MNRC	Mock/Grant	UCD	Expose Sample	Group A
13:30	UCD	Rich Ott	UCD	NaI Lab	Group C
15:00	UCD	Felde/Dhooghe	UCD	Muon Veto	Group D
13:30	UCD	Rich Ott	UCD	NaI Lab	Group D
15:00	UCD	Felde/Dhooghe	UCD	Muon Veto	Group C
19:00	Central Park	Mani Tripathi		Farmer's Market	
Thursday, June 28					
8:30	MNRC	Mock/Grant		Leave for MNRC	
9:00	MNRC	Ben Liu	UCD	Reactor Neutronics and Modeling	Group A/B
10:30	MNRC	Mock/Grant	UCD	Count Samples - Data Analysis	Group A
10:30	MNRC	Michael Lerche	UCD	Radiography	Group B
12:00	MNRC			Lunch	Group A/B
13:30	MNRC	Mock/Grant	UCD	Count Samples - Data Analysis	Group B
13:30	MNRC	Lerche	UCD	Radiography	Group A
16:30		Mock/Grant	UCD	Leave for Davis	Group A/B
8:30		Nick Walsh	UCD	Leave for Livermore	Group C/D
10:00	Livermore	Various	LLNL	Tour of LLNL	Group C/D
12:00	Livermore			Lunch	Group C/D
13:30	Livermore	Various	Sandia	Tour of Sandia	Group C/D
16:00	Livermore	Nick Walsh	UCD	Leave for Davis	Group C/D
17:30		Nick Walsh	UCD	Arrive in Davis	Group C/D
Friday, June 29					
8:30	UCD	Mock/Grant	UCD	Group C/D Depart for MNRC	
9:00	MNRC	Mock/Grant	UCD	Calibrate Ge detectors	Group C
9:00	MNRC	Mock/Grant	UCD	Expose Sample	Group D
10:30	MNRC	Mock/Grant	UCD	Calibrate Ge detectors	Group D
10:30	MNRC	Mock/Grant	UCD	Expose Sample	Group C

9:00	UCD	Rich Ott	UCD	NaI Lab	Group A
9:00	UCD	Felde/Dhooghe	UCD	PMT	Group B
10:30	UCD	Rich Ott	UCD	NaI Lab	Group B
10:30	UCD	Felde/Dhooghe	UCD	PMT	Group A
12:00	Segundo Dining Hall			Lunch	
10:00	Room 185 Physics	Bob Svoboda	UCD	Physics of Nuclear Reactors	
14:30	Room 185 Physics	Morgan Burks	LLNL	Gamma Ray Imaging	
15:30	Room 185 Physics			Coffee Break	
16:00	Room 185 Physics	Peter Marleau	Sandia	Neutron Detection and Imaging	
17:00	Room 185 Physics	Kareem Kazkaz	LLNL	Noble Gas and Liquid Detectors	
18:00	Putah Creek Lodge	Dan Cebra		Social hour - BBQ	
Saturday, June 30					
8:00	Room 185 Physics			Coffee	
9:00	Room 185 Physics	Adam Bernstein	LLNL	Nuclear Safeguards - Technical Overview	
10:00	Room 185 Physics	Kevin Strecker	Sandia	Laser based techniques for Nuclear Forensics	
11:00	Room 185 Physics	Erik Brubaker	Sandia	Applications of Neutron Imaging	
12:00	Segundo Dining Hall			Lunch	
13:30	PMT Lab	Felde/Dhooghe	UCD	Muon	Group A
13:30	Muon Lab	Felde/Dhooghe	UCD	PMTs	Group C
15:30	Muon Lab	Felde/Dhooghe	UCD	Muon	Group B
15:30	PMT Lab	Felde/Dhooghe	UCD	PMTs	Group D
				When not in an activity, groups work on Bethe-Block problem	
Sunday, July 1		Holiday			
Monday, July 2					
8:30	MNRC	Mock/Grant		Leave for MNRC	Group C/D
9:00	MNRC	Ben Liu	UCD	Reactor Neutronics and Modeling	Group C/D
10:30	MNRC	Mock/Grant	UCD	Count Samples - Data Analysis	Group C
10:30	MNRC	Michael Lerche	UCD	Radiography	Group D
12:00	MNRC			Lunch	Group C/D
13:30	MNRC	Mock/Grant	UCD	Count Samples - Data Analysis	Group D
13:30	MNRC	Lerche	UCD	Radiography	Group C
16:30		Mock/Grant	UCD	Leave for Davis	Group C/D
8:30		Nick Walsh	UCD	Leave for Livermore	Group A/B

10:00	Livermore	Various	LLNL	Tour of LLNL	Group A/B
12:00	Livermore			Lunch	Group A/B
13:30	Livermore	Various	Sandia	Tour of Sandia	Group A/B
16:00	Livermore	Nick Walsh	UCD	Leave for Davis	Group A/B
17:30	Livermore	Nick Walsh	UCD	Arrive in Davis	Group A/B
Tuesday, July 3					
8:00	Room 185 Physics			Coffee	
8:30	Room 185 Physics	Carlos Castaneda	UCD	Proton Cyclotrons	
9:20	Room 185 Physics	Chuck McDade	UCD	Nuclear Applications: Air Quality Monitoring	
10:10				Coffee Break	
10:30	Room 185 Physics	Jerry Bushberg	UCD	Health Physics in the Nuclear Sciences	
11:30	Room 185 Physics	Speakers		Discussion	
12:00	Segundo Dining Hall			Lunch	
13:30	Crocker Lab	Carlos Castaneda	UCD	CNL Tour & Bragg Peak Expt. (63 MeV protons)	
Wednesday, July 4 Independence Day					
19:00	Community Park	Bob Svoboda		BBQ at Svoboda's and Fireworks Display (Park)	
Thursday, July 5					
8:00	Room 185 Physics			Coffee	
8:30	Room 185 Physics	Simon Cherry	UCD	Advances in In Vivo Nuclear Imaging Technologies	
10:00				Coffee Break	
10:15	Room 185 Physics	M. Lagunas-Solar	UCD	Radioisotopes in Medicine and Industry	
11:00	Room 185 Physics	Ken Czerwinski	UNLV	Actinide Science and Radiochemistry	
11:45	Room 185 Physics	Speakers		Discussion	
12:15	Segundo Dining Hall			Lunch	
13:30		OPEN		Students to finish their reports	
Friday, July 6					
8:00	Room 185 Physics			Coffee	
8:30	Room 185 Physics	Marc Bergevin	UCD	Nuclear Science: Double Beta Decay Experiments	
9:30	Room 185 Physics	Matthew Szydagis	UCD	Nuclear Science: Dark Matter Experiments	
10:30				Coffee Break	
10:45	Room 185 Physics	Nathaniel Bowden	LLNL	Nuclear Science: Reactor Neutrino Oscillations	
11:45	Room 185 Physics	Bob Svoboda	UCD	Closing Remarks	