

**2008 Professional Development School
Oakland, CA
January 31–February 2, 2008**

The 2008 professional development school (formerly the HPS summer school), titled “Topics in Accelerator Health Physics,” will immediately follow the 2008 midyear meeting of the HPS (titled “Radiation-Generating Devices”) in Oakland, California. The school will allow students to choose from two concurrent courses of study, depending on their backgrounds.

- The first track, “Overview of Accelerator Health Physics,” will provide a broad survey of the field and is aimed specifically at students who are new to accelerator health physics, work in other fields but have an interest in accelerator health physics, or want a review of basic issues.
- The second track, “Special Topics in Accelerator Health Physics,” will expand upon the topics covered in the first track, providing detailed study for students who are currently working in the field. Students may move between tracks to design a flexible program that best fits their needs.

Syllabus

TOPICS IN ACCELERATOR HEALTH PHYSICS		
Wednesday, January 30, 2008		
Time	Topic	Speaker
6:00 – 7:30 PM	Reception for faculty and deans	

TOPICS IN ACCELERATOR HEALTH PHYSICS		
DAY ONE – Thursday, January 31, 2008		
Time	Topic	Speaker
07:30 – 08:30	Continental breakfast	
08:30 – 09:00	Welcome, introduction; handouts of materials; logistics	The Deans
Track 1: Overview of Accelerator Health Physics		
09:00 – 10:30	Beam transport and optics for health physicists	D. Cossairt
10:30 – 10:45	Morning coffee break	
10:45 – 12:00	Prompt radiation fields at accelerators	V. Vylet
12:00 – 1:30	Lunch & discussion	
1:30 – 3:00	Induced activity	D. Cossairt
3:00 – 3:30	Afternoon break	
3:30 – 5:00	Radiation monitoring and measurements	K. Vaziri/ L. Moritz
Track 2: Special Topics in Accelerator Health Physics		
09:00 – 10:30	Accelerator health physics program administration and integrated safety management	G. Zeman
10:30 – 10:45	Morning coffee break	
10:45 – 12:00	Accelerator health physics program administration and integrated safety management	G. Zeman
12:00 – 1:30	Lunch & discussion	
1:30 – 3:00	Radiation damage considerations at accelerators	K. Sickafus
3:00 – 3:30	Afternoon break	
3:30 – 5:00	Radiation damage considerations at accelerators	K. Sickafus
6:00 – 7:30	Reception for students, faculty, and deans	

TOPICS IN ACCELERATOR HEALTH PHYSICS		
DAY TWO – Friday, February 1, 2008		
07:30 – 08:30	Continental breakfast	
Track 1: Overview of Accelerator Health Physics		
08:30 – 10:00	Accelerator shielding	S. Rokni
10:00 – 10:30	Morning coffee break	
10:30 – 12:00	Radiation damage	K. Sickafus
12:00 – 1:30	Lunch & discussion	
1:30 – 3:00	Medical applications of accelerators	G. Coutrakon
3:00 – 3:30	Afternoon break	
3:30 – 5:00	Challenges of personnel dosimetry at accelerators	J. McDonald
Track 2: Special Topics in Accelerator Health Physics		
08:30 – 10:00	Synchrotron radiation sources and free electron lasers	V. Vylet
10:00 – 10:30	Morning coffee break	
10:30 – 12:00	Synchrotron radiation sources and free electron lasers	V. Vylet
12:00 – 1:30	Lunch & discussion	
1:30 – 3:00	Safety systems at accelerators	J. Liu
3:00 – 3:30	Afternoon break	
3:30 – 5:00	Safety systems at accelerators	J. Liu
7:00 – 10:00	Night out in Chinatown	
DAY THREE – Saturday, February 2, 2008		
07:30 – 08:30	Continental breakfast	
Track 1: Overview of Accelerator Health Physics		
08:30 – 10:00	Environmental monitoring	K. Vaziri/ L. Moritz
10:00 – 10:30	Morning coffee break	
10:30 – 12:00	Safety systems at accelerators	J. Liu
12:00 – 1:30	Lunch	
1:30 – 3:00	Current and future challenges in accelerator health physics program management	G. Zeman
3:00 – 3:30	Afternoon break	
3:30 – 5:00	Induced radioactivity in environmental media	D. Cossairt
Track 2: Special Topics in Accelerator Health Physics		
08:30 – 10:00	The physics of particle accelerators for health physicists	D. Cossairt
10:00 – 10:30	Morning Coffee Break	
10:30 – 12:00	The physics of particle accelerators for health physicists	D. Cossairt
12:00 – 1:30	Lunch	
1:30 – 3:00	Medical applications of accelerators	G. Coutrakon
3:00 – 3:30	Afternoon break	
3:30 – 5:00	Medical applications of accelerators	G. Coutrakon