



**PENELOPE/penEasy variance reduction techniques applied to environmental dosimetry  
Barcelona, May 24-25, 2016**

**SCHEDULE**

<b>Time</b>	<b>Topic</b>	<b>Lecturer</b>
<b>Tuesday 24</b>		
10:00 – 10:30	Welcome & introduction	A Vargas, J Sempau
10:30 – 11:30	<b>1. Monte Carlo simulation of radiation transport</b> - Fundamentals of the MC method - Radiation transport - Photon interactions	J Sempau
11:30 – 13:00	<b>2. The PENELOPE/penEasy system</b> - Structure, installation and operation	J Sempau
13:00 – 14:00	Lunch	
14:00 – 15:00	- Materials and geometry	
15:00 – 17:00	<b>3. Exercises:</b> - NaI detector	J Sempau
<b>Wednesday 25</b>		
10:00 – 11:00	<b>4. Variance-reduction techniques</b> - Basic concepts - Reciprocal transformation - Detection forcing	J Sempau
11:00 – 13:00	<b>5. Exercises:</b> - Exercise: response environmental spectrometric monitor: Detection forcing variance reduction	A Vargas
13:00 – 14:00	Lunch	
14:00 – 17:00	- Exercise: response environmental spectrometric monitor: Reciprocal variance reduction	A Vargas