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SCIENCE DATA CENTRE

Centre attaché à l'Observatoire de Genève



**UNIVERSITÉ  
DE GENÈVE**

FACULTÉ DES SCIENCES  
Département d'astronomie

## EXTRAORDINARY SEMINAR



Friday, 26 January 2007 at 11:00

# Radiotherapy, the treatment of cancer with ionizing radiation

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**Abstract.** I will give an overview of the job of a medical physicist in a radio-oncology department of a public Swiss hospital. After a short description of the different types of cancer routinely treated, I will describe the biological effects of ionizing radiation on the tumors, i.e. the radiobiology of the treatments. I will also describe the sources of radiation — in particular the clinical linear accelerator — as well as the means used to deliver a given dose of radiation precisely on a tumor, avoiding the surrounding tissues/organs which are often at risk, i.e. organs in which the dose shall be minimised in order to avoid the loss of its functionality. I will finish with a few perspectives, both in terms of progression of the number of new cases detected each year and in terms of the new advanced techniques designed to respond to this phenomenon.

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### Additional Information

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The seminars are given in the ISDC "Pavillon" building  
Address: INTEGRAL Science Data Centre, ch. d'Écogia 16, CH-1290 Versoix  
WWW: ISDC Seminars: <http://isdc.unige.ch/?Science+seminars>