## SYRA3 Training School in 2014- EMBL Seminar room

Location and time: ESRF, Grenoble, May 18-21		Organization: SYRA3 training School	<b>Lectures and Practicals</b>
Time Sunday 185.	Monday 195.	Tuesday 20.5.	Wednesday 21.5.
09:00	Opening: Introduction of SR P. Suortti 45' SR methods: SSRT and MRT A.Bravin 45'	Safety aspects in MRT and SSRT P. Berkvens 30' Dosimetry in SSRT JF Adam 30' Dosimetry in MRT E. Bräuer-Krisch 30'	Is DNA a good target to improve radiotherapy efficacy JL Ravanat 45' Biological basis of MRT L. Pelletier 45'
10:30	Coffee/Tea	Coffee/Tea	Coffee/Tea
11:00	Monochromatic radiotherapy: From first experimental glioma bearing rat therapy up to the first clinical trial F.Esteve 45' MRT Medical Introduction E. Schültke 45'	Radiosurgery of epilepsy: another applications of MRT A De Paulis 45' Radiation Biology with high Z elements G. Le Duc 45'	Preclinical results in MRT  J. Laissue 45'  short break / discussion  Animal Patient MRT trials  J. Laissue 30'
12:30 14:00	Lunch	Lunch	Lunch
14.00	Non-targeted effects of synchrotron radiation; possible relevance in the clinic C. Mothersill 45'+45'	Practicals CT imaging P. Coan	Preclinical results SSRT H. Elleaume 45' Clinical trials SSRT J. Balosso 45'
15:30	Coffee/Tea	Coffee/Tea	Coffee in the Visitor Centre Meeting with the teachers: questions and answers
16:00	Biological basis of SR therapy V. Djonov 45' CT Imaging methods P. Coan 45'	Practicals  Dosimetry and Safety E. Bräuer-Krisch	Closing
18:30 Welcome Poster Session	Dinner at the ESRF/ILL restaurant	Dinner at a restaurant in Grenoble	

ESRF/ILL cafetaria

## **Topics:**

Radiation biology is the central area – the effects on vasculature, on cell and DNA level; bystander effects, recovery mechanisms in MRT, dose enhancement by heavy elements

SSRT and MRT protocols – in SSRT tumor "loading" by iodine and imaging of the absolute distribution - in MRT optimization of geometry (beam widths and separation; interlacing)