

Schedule of Lectures and Exercises

- ☐ **Week 1a** (17.09.13): Introduction: Motivation and **Physical Basics**
- ☐ Week 1b (17.09.13): Radiation Sources, Detectors
- ☐ Week 1c (17.09.13): **Seminar & Exercises/Organisation**
- ☐ Week 2a (24.09.13): Radiation Shielding
- ☐ **Week 2b** (24.09.13): **Biological Effects** of Radiation
- ☐ Week 2c (24.09.13): **Exercises (W1a) & Exercises (W1b)**
- ☐ **Week 3a** (01.10.13): **Medical Diagnostics**, Radiopharmaceuticals
- ☐ Week 3b (01.10.13): Radiotherapy: Fundamentals, Methods (part 1)
- ☐ Week 3c (01.10.13): **Seminar: Health Effects of Low Dose Radiation & Exercises (W2a)**
- ☐ Week 4a (15.10.13): Radiotherapy: Methods (part 2)
- ☐ Week 4b (15.10.13): Treatment Planning
- ☐ Week 4c (15.10.13): **Seminar: Proton Therapy at PSI & Exercises (W3b)**
- ☐ **Week 5a** (05.11.13): **Industrial Applications:** Gauges and Radiotracers
- ☐ Week 5b (05.11.13): Polymerisation, Food Irradiation, Radioisotope Batteries
- ☐ Week 5c (05.11.13): **Seminar & Exercises (W4a)**
- ☐ Week 6a (12.11.13): Gamma and Neutron Radiography
- ☐ **Week 6b** (12.11.13): **Applications in Natural Sciences:** Neutron Activation Analysis, Nuclear Dating
- ☐ Week 6c (12.11.13): **Seminar: NEUTRA / ICON Facilities at PSI & Exercises (W5a)**
- ☐ **Week 7a** (19.11.13): **Radiochemistry Applications**
- ☐ Week 7b (19.11.13): Radionuclides to Protect the Environment
- ☐ Week 7c (19.11.13): **Seminar: PROTRAC Facility at PSI & Exercises (W6b)**