

**PROGRAMME**  
**PHYSICS FOR CLINICAL RADIOTHERAPY**  
 Porto, Portugal - October 16-21, 2011

| <b>Sunday<br/>16 October</b>  | <b>Topic</b>   | <b>Speaker</b>             |
|-------------------------------|--|----------------------------|
| 08.30 - 08.45                 | Welcome address  |                            |
| 08.45 - 09.00                 | Introduction to the course                                   | B. Heijmen +All teachers   |
| 08.45 - 09.00                 | ENTRANCE EXAM  | B. Heijmen                 |
| 10.00 - 10.30                 | <i>Coffee break</i>  |                            |
| 10.30 - 11.15                 | CT for treatment preparation and planning                    | L.P.Romasanta              |
| 11.15 - 12.00                 | Imaging for GTV definition I                                 | I.Kunkler                  |
| 12.00 - 12.45                 | Volumes in EBRT  | L.P.Romasanta              |
| 12.45 - 14.00                 | <i>Lunch</i>   |                            |
| 14.00 - 14.45                 | Dose prescription and plan evaluation                        | M.van Vulpen/T.Depuydt     |
| 14.45 - 16.00                 | X1: Discussions on palliative case                           | S. Peeters/S.Molinelli     |
|                               | X2: Discussions on palliative case                           | M.van Vulpen/ T.Depuydt    |
|                               | X3: Discussions on palliative case                           | I. Kunkler/B.Heijmen       |
|                               | X4: Discussions on palliative case                           | L.P.Romasanta<br>M. Tomsej |
| 16.00 - 16.30                 | <i>Coffee break</i>  |                            |
| 16.30 - 17.15                 | IMRT and 3DCRT - basics of clinical application              | S. Peeters                 |
| 17.15 - 18.00                 | IGRT - tumor set-up correction strategies                    | B. Heijmen                 |
| 18.00 - 18.20                 | Wrap up of palliative HOMEWORK case                          | S. Peeters/S.Molinelli     |
| 19.00 - 20.30                 | Welcome reception  |                            |
| <b>Monday<br/>17 October</b>  | <b>Topic</b>   | <b>Speaker</b>             |
| 08.30 - 09.15                 | Radiobiology in the clinic                                   | M.van Vulpen               |
| 09.15 - 10.00                 | Basics of stereotactic RT                                    | S. Peeters                 |
| 10.00 - 10.30                 | <i>Coffee break</i>  |                            |
| 10.30 - 11.15                 | <b>Clinicians:</b> Basic Radiation Physics I                 | S.Molinelli                |
|                               | <b>Physicists:</b> Dose calculation I                        | M.Tomsej                   |
| 11.15 - 12.00                 | IGRT - equipment for in-room imaging                         | M.van Vulpen               |
| 12.00 - 12.45                 | IGRT - set-up correction in clinical practice                | L.P.Romasanta              |
| 12.45 - 14.00                 | <i>Lunch</i>   |                            |
| 14.00 - 14.45                 | <b>Clinicians:</b> Basic Radiation Physics II                | S.Molinelli                |
|                               | <b>Physicists:</b> Dose calculation II                       | M. Tomsej                  |
| 14.45 - 16.00                 | X1: Discussions on breast case                               | L.P.Romasanta<br>M.Tomsej  |
|                               | X2: Discussions on breast case                               | S. Peeters/S.Molinelli     |
|                               | X3: Radiotherapy equipment and software                      | companies                  |
|                               | X4: Radiotherapy equipment and software                      | companies                  |
| 16.00 - 16.30                 | <i>Coffee break</i>  |                            |
| 16.30 - 17.45                 | X1: Radiotherapy equipment and software                      | companies                  |
|                               | X2: Radiotherapy equipment and software                      | companies                  |
|                               | X3: Discussions on breast case                               | M.van Vulpen/T.Depuydt     |
|                               | X4: Discussions on breast case                               | I. Kunkler/B.Heijmen       |
| 17.45 - 18.05                 | Wrap up of lung HOMEWORK case                                | I.Kunkler/B. Heijmen       |
| <b>Tuesday<br/>18 October</b> | <b>Topic</b>   | <b>Speaker</b>             |
| 08.30 - 09.15                 | <b>Clinicians:</b> Basic Dose Calculation Principles         | T. Depuydt                 |
|                               | <b>Physicists:</b> Reference Dosimetry                       | B.Heijmen                  |
| 09.15 - 10.00                 | <b>Clinicians:</b> Principles of Radiation Therapy Equipment | M. Tomsej                  |

|                                 |  |                           |
|---------------------------------|--|---------------------------|
|                                 | <b>Physicists: Basic Oncologic Concepts</b>                                      | L.P.Romasanta             |
| 10.00 - 10.30                   | <i>Coffee break</i>  |                           |
| 10.30 - 11.15                   | Imaging for GTV definition II  | I.Kunkler                 |
| 11.15 - 12.00                   | <b>Clinicians:</b> Calculation of dose distribution in TPS                       | T. Depuydt                |
|                                 | <b>Physicists:</b> non-reference dosimetry                                       | B. Heijmen                |
| 12.00 - 12.45                   | <b>Clinicians/ Physicists:</b> Radiation protection                              | S.Molinelli               |
|                                 | <b>Clinicians /Physicists:</b> Commissioning and QA/QC of equipment and software | M.Tomsej                  |
| 12.45 - 14.00                   | <i>Lunch</i>   |                           |
| 14.00 - 14.45                   | Field junctions: theory and practice   | I.Kunkler/ B. Heijmen     |
| 14.45 - 16.00                   | X1: Discussions on lung case   | I.Kunkler/ B. Heijmen     |
|                                 | X2: Discussions on lung case   | L.P.Romasanta<br>M.Tomsej |
|                                 | X3: Radiotherapy equipment and software  | companies                 |
|                                 | X4: Radiotherapy equipment and software  | companies                 |
| 16.00 - 16.30                   | <i>Coffee break</i>  |                           |
| 16.30 - 17.45                   | X1: Radiotherapy equipment and software  | companies                 |
|                                 | X2: Radiotherapy equipment and software  | companies                 |
|                                 | X3: Discussions on lung case   | S. Peeters/S.Molinelli    |
|                                 | X4: Discussions on lung case   | M.van Vulpen/T.Depuydt    |
| 17.45 - 18.05                   | Wrap up of lung HOMEWORK case  | M.van Vulpen /TD          |
| 20.00                           | <i>Social dinner</i>   |                           |
| <b>Wednesday<br/>19 October</b> | <b>Topic</b>   | <b>Speaker</b>            |
| 09.00 - 13.15                   | FREE MORNING   |                           |
| 13.15 - 14.00                   | In-vivo Dosimetry  | T. Depuydt                |
| 14.00 - 14.45                   | Basics of rotational therapy   | B. Heijmen                |
| 14.45 - 16.00                   | X1: Discussions on head and neck case  | M.van Vulpen/T.Depuydt    |
|                                 | X2: Discussions on head and neck case  | I.Kunkler / B. Heijmen    |
|                                 | X3: Radiotherapy equipment and software  | companies                 |
|                                 | X4: Radiotherapy equipment and software  | companies                 |
| 16.00 - 16.30                   | <i>Coffee break</i>  |                           |
| 16.30 - 17.45                   | X1: Radiotherapy equipment and software  | companies                 |
|                                 | X2: Radiotherapy equipment and software  | companies                 |
|                                 | X3: Discussions on head and neck case  | L.P.Romasanta<br>M.Tomsej |
|                                 | X4: Discussions on head and neck case  | S. Peeters/S.Molinelli    |
| 17.45 - 18.05                   | Wrap up of head and neck HOMEWORK case   |                           |
| <b>Thursday<br/>20 October</b>  | <b>Topic</b>   | <b>Speaker</b>            |
| 08.30 - 09.15                   | Basics of Brachytherapy  | M.van Vulpen              |
| 09.15 - 10.00                   | IMRT - Physics aspects   | T. Depuydt                |
| 10.00 - 10.30                   | <i>Coffee break</i>  |                           |
| 10.30 - 11.15                   | Radiotherapy dose and induction of secondary tumors                              | S. Peeters                |
| 11.15 - 12.15                   | Exit exam  |                           |