



Legnaro, Padova, Laboratories of *Istituto Nazionale di Fisica Nucleare*, Villi conference room

30-31 January, 2017

Discussion seminar of MediNet-Task 2 on the specification of radiation quality in the framework of radiation therapy with proton and carbon-ion. Detectors and computational tools for supporting treatment with a more accurate and detailed description of the complexity of the radiation interaction.*

Monday 30 January 2017, from 11:00

9:30 Transfer Bus pickup from Padova: Via Gabriele Falloppio, crossroad Via Ospedale Civile, near the newsstand. (20 minutes ride to Legnaro Laboratories) [view of the pickup location](#)

10:00 *Coffee served*

STATUS OF THE ART

- **11:00** *Welcome*
 - *Welcome Address of LNL Director*, Diego Bettoni
 - *Meeting framework*, Giulio Magrin (MEDAUSTRON)
- **11:15** *State of the art of the physical tools: Radiation quality detectors for ion-beam therapy*
 - *Microdosimeters (active detectors)*. Paolo Colautti (LNL-INFN)
 - *LET and track detectors (passive detectors)*. Marzena Rydygier (IFJ-PAN)
 - *Discussion. During the discussion few slides (three) can be used to show new data and apparatus.*

12:30 *Lunch*

- **13:30** (cont.) *State of the art of the physical tools: Monte Carlo modelling of physical and biological parameters for ion-beam therapy*
Pablo Cirrone (LNS), Lydia Maigne (LPC-IN2P3)
 - **14:45** *The biological effectiveness - From biological data to clinical data*. Manjit Dosanjh (CERN), Aleksandra Ristic Fira (VINCA)
- 16:00 *Coffee break*
- **16:30** *Challenges in correlating the radiation quality data and clinical effectiveness*, Michael Scholz (GSI)
 - *Proton models and carbon-ion models*
 - *Developing a Treatment Planning System*
 - **17:45** *Round table: The participants can propose 3-slide contributions to integrate and fill the gaps on the topics presented.*

SOCIAL DINNER

- **19:30** *Bus from the laboratories to the restaurant*
- **22:30** *Transfer Bus from the restaurant to Padova*

Tuesday 31 January 2017, from 9:00

8:20 Transfer Bus pickup from Padova: Via Gabriele Falloppio, crossroad Via Ospedale Civile, near the newsstand. (20 minutes ride to Legnaro Laboratories) [view of the pickup location](#)

MOVING FORWARD

- **9:00** *An open discussion for defining an achievable roadmap for radiation quality assessment for therapy with carbon and other ions.*
Chair: Mario Ciocca (CNAO)
- 10:30 *Coffee break*
- **11:00** *An open discussion for defining an achievable roadmap for radiation quality assessment for therapy with protons.*
Chair: Marco Schwarz (APSS-TIFPA)
- 12:30 *Lunch*
- **13:30** *Visit to Legnaro Laboratories*

MEDINET ANNUAL REPORTS

- **14:30** *Completion of the first annual report of the Working Groups WG6, WG7, WG8, WG9 - Planning of future activities*
- 15:30 *Coffee served*
- **16:30** *Conclusion*
- 17:00 *Transfer Bus to Padova*

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