Results: Simulations and dose measurements showed good agreement of relative dose profiles at depths of 14.75, 18.05 and 24.05cm for field sizes of 5 x 5, 10 x 10 and 15 x 15cm^2. The overall absolute difference of measured and planned target doses was ~1% (see Table 1).

Conclusions: Accurate MC-based BM was obtained and integrated into the TPS matRad. Absolute and relative dose measurements were in agreement with IMPT phantom plans. Validation will be continued with absolute and relative dosimetry of patient plans.

P 231 - Training the future in HITRIplus project: A report on specialised course on heavy ion therapy research

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Heavy ion therapy is highly active topic including a vast of different interdisciplinary research fields. Despite this, many early-career researchers in associated fields have limited exposure to information outside of their domain. With the shortage of experienced personnel, detailed courses are essential for training and to bridge the divide between communities of young researchers in radiobiology, medical physics and technical sciences. A specialised course by HITRIplus was organised to meet these needs, aimed at researchers of different academic levels from a wide range of international and research backgrounds. To ensure the needs of the participants were understood, the organising committee included several early-career volunteers to help craft an engaging course inviting faculty of international experts to provide the relevant content. Main aspects of the course organizing process will be outlined, including the student application process and statistics, student selection criteria, choice of scientific topics covered in the course and inclusion of other relevant topics such as entrepreneurship and public speaking. The course took place in July virtually. The restricted number of course participants was offset by making the lectures available on YouTube immediately after each session. As each lecture had allocated time for interaction, excellent participation and student engagement with the faculty members was reached. The additional student sessions are also outlined and discussed. The course was successful in delivering a robust series of lectures, hands on sessions and student sections in a virtual environment. Participant feedback was highly positive and main statistics and results from course exit-poll are shown.

P 232 - Impact of intra-fractional motion and setup uncertainties in ocular proton therapy

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Dosimetric effects of intra-fractional motion in ocular proton therapy have been investigated using an in-house developed treatment planning system (TPS). The novel TPS simulates dose and eye motion measured with an eye tracking system (ETS) to study the deterioration of the planned dose distribution. The treatment plan defined in the clinical TPS (Eyeplan) was recreated in the research TPS in order to validate consistency of results in static conditions. For a first example patient,