Scientific Curriculum Vitae

Personal Information

Name	Barbara Knäusl
Date of Birth	August 14th 1984
Place of Birth	Munich, Germany
Nationality	German
Family	Daugther (born 2018)
Degrees	Priv.Doz. Mag.rer.nat., PhD
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Professional Address

Division Medical Radiation Physics, Department of Radiation Oncology
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Summary of scientific work

First, senior or corresponding author	*18*
Co-author	*18*
Total number of publications	***36***
Hirsch index	*13 (Scopus)*

Education

01/2024	**Venia docendi (Habilitation) at the Medical University Vienna in *Medical Physics***
03/2015	**Fachanerkennung für Medizinische Physik**
10/2008–03/2015	**Postgraduate course in Medical Physics**, *Medical University of Vienna*
10/2008–06/2012	**PhD in Medical Physics**, *Medical University of Vienna* Biologically adapted radiotherapy - medical physics aspects for quantitative PET analysis and treatment planning; Supervisor: Univ. Prof. Dr. Dietmar Georg
06/2008	**Master of Science in Physics** Dosimetric Characteristics of a Flattening Filter Free Photon Beam; Supervisor: Univ. Prof. Dr. Dietmar Georg
10/2004–06/2008	**Diploma Study in Physics**, *University of Vienna*
10/2003–10/2004	**Diploma Study in Meteorology and Geophysics**, *University of Vienna*
06/2003	**Graduation (Abitur)**, *grammar school, Albrecht-Altdorfer-Gymnasium, Regensburg, Germany*

Professional Experience

since 09/2014 **Post-doc research associate**, *Medical University of Vienna, Department of Radiation Oncology, Division of Medical Physics*
Maternity Leave (11/2018–07/2019)
Medical Physicist (ion beam therapy) at EBG MedAustron (09/2014–10/2020)
Medical Physicist at the Department of Radiation Oncology (since 11/2020)

02/2012–09/2014 **Post-doc research associate**, *Medical University of Vienna, Department of Radiation Oncology, Division of Medical Physics*
Christian Doppler Laboratory for Medical Radiation Research for Radiation Oncology

11/2008–01/2012 **Scientific assistant (Ph.D student)**, *Medical University of Vienna, Department of Radiation Oncology, Division of Medical Physics*

Research stays

02/2018–06/2018 **Post-doc research fellow and external advisor**, *Holland Proton Therapy Center (Holland PTC)*, Delft, Netherlands

05/2014 **Research fellow**, *Center for Proton Radiotherapy, Paul-Scherrer Institut (PSI)*, Villigen, Switzerland

Project Lead and Grant Activities

Grants

from 01/2024 **PI** in *IRENE - CD-Laboratory for Image and knowledge dRiveEN prEcision radiation oncology*, Christian Doppler Society (€ 2 052 016.00)

since 05/2022 **Vice-coordinator, PI** and **PhD supervisor** in *PAIR - Pre-clinicAl Ion beam Research*, FWF Doc Funds Connect (€ 396 900.00)

since 03/2021 **PI** at the Medical University of Vienna and **PhD Supervisor** in the *RAPTOR "Real-Time Adaptive Particle Therapy Of CanceR Grant" (ID 955956)*, H2020-MSCA-ITN-2020 (€ 222 087.24)

09/2018 – 06/2022 **Co-PI** and **PhD supervisor** in *KWF INCONTROL (Clinical Control Infrastructure for Proton Therapy Treatment)* research project in cooperation with the UMCG Groningen (Project lead: Prof. Dr. Stefan Both)

01/2012 – 12/2019 **Scientific management assistant** and **project coordinator** in *Christian Doppler Laboratory for Medical Radiation Research for Radiation Oncology* (Laboratory head: Univ. Prof. Dr. Dietmar Georg)

Project lead and coordination activities

since 2020 Main organiser of the *"4D treatment Planning Workshop for particle therapy"*

since 01/2019 **Project leader** for *"Intrafraction motion management"* and *"Technological innovations and clinical implementation"* research at the MedAustron Center for Ion Therapy and Research

Research and Clinical Activities

- Ion beam therapy: proton and carbon ion therapy, novel ion species, (4D) treatment planning
- Dosimetry: photons (kV and MV), protons and carbon ions, beam line and equipment commissioning, regular QA, detector calibration
- Image guidance: adaptive treatment concepts, deformable image registration, breathing motion implementation, 4DCT , MRI in Radiotherapy
- Treatment planning: TPS commissioning, photon and ion beam therapy, clinical implementation
- Nuclearmedicine: Positron emission tomography (PET), SPECT
- Paediatric radiotherapy
- Pre-clinical Research

Awards

09/2020 Georg D (PI) , Clausen M, Gruber S, **Knäusl B**, Kuess P, Fuchs H, Resch A Wissenschaftspreis des Landes Niederösterreich 2020

Collaboration Partners

MedAustron Ion Beam Therapy Center, TU Wien and VetMedUni, FH Wiener Neustadt/FH Technikum/FH Campus- Wien, TU Dortmund (Germany), Paul-Scherrer Institute (PSI) (Switzerland), Holland PTC Proton Therapy Center (Netherlands), University of Groningen (Netherlands), Umeå University (Sweden), University di Roma (Italy), MD Anderson (Texas, US), Mayo Clinic (Florida, US)

Professional Membership

Austrian Society for Medical Physics (ÖGMP)

European Society for Radiotherapy & Oncology (ESTRO)

Austrian Society for Radiation Oncology (ÖGRO)

Activities for peer reviewed journal

Associate Editor of Physics and Imaging in Radiation Oncology (phiRO)

Reviewer of scientific papers for the following Journals: Physics in Medicine and Biology, Radiotherapy and Oncology, Medical Physics, Physica Medica, Zeitschrift für Medizinische Physik, International Journal Radiation Oncology Biology and Physics, Acta Oncologica

Oral conference contributions since 2013

05/2023 Real time motion management - dream or reality? ESTRO 2023, Vienna, Austria

03/2022 Image guided small animal scanned proton and x ray reference irradiation, 5th conference on small animal precision image-guided radiotherapy, Munich, Germany

10/2021 Technische Innovationen bei RT der Mamma, ÖGRO Jahrestagung, Vienna, Austria

09/2021 The influence of beam and organ motion on pancreas proton irradiations, Dreiländertagung der Medizinschen Physik, Virtual meeting

03/2018 Adaptive Strahlentherapiekonzepte in der Strahlentherapie, Winterschule Pichl für Medizinische Physik, Pichl, Austria

03/2018 Bestrahlungsplanung in der Teilchentherapie, Winterschule Pichl für Medizinische Physik, Pichl, Austria

11/2017 Are pencil beam models becoming obsolete for physical dose calculation? 1st ESTRO Physics Workshop, Glasgow, United Kingdom

12/2016 Overview 4D research phantoms, 4D Treatment (planning) workshop, Groningen, Netherlands

10/2015 Treatment of extremity sarcoma using protons - robustness considerations of single and matching fields, ÖGMP Jahrestagung, Wiener Neustadt, Austria

10/2015 MR guided radiotherapy, Österreichische Gesellschaft für Radioonkologie Jahrestagung, Vienna, Austria

07/2015 Particle Therapy, Vienna Summer School on Oncology, Vienna

02/2014 and 06/2014 Can particle beam therapy be improved using helium ions? - A treatment planning study focusing on pediatric patients, ICTR-PHE 2014, Geneva, Switzerland and PTCOG 53, Shanghai, China

09/2013 The devil is in the details – challenges and possibilities of modern radiotherapy techniques, ÖGRO Jahrestagung, Bregenz, Austria

09/2013 Gantry vs. Fixed beam techniques in ion beam therapy: impact on treatment plan quality and robustness, ÖGRO Jahrestagung, Bregenz, Austria

05/2013 Christian Doppler Laboratory for Medical Radiation Research for Radiation Oncology, ÖGMP Jahrestagung, Innsbruck, Austria

04/2013 and 05/2013 Assessment of improved organ at risk sparing for meningioma for mixed or single photon and particle beam treatments, 2nd ESTRO forum, Geneva, Switzerland and ÖGMP Jahrestagung, Innsbruck, Austria

More than 30 poster presentations during national and international meetings with published abstracts in the respective proceeding books

List of Publications

[1] G. Kragl, S. af Wetterstedt, B. Knäusl, M. Lind, P. McCavana, T. Knöös, B. McClean, and D. Georg. "Dosimetric characteristics of 6 and 10 MV unflattened photon beams". *Radiotherapy and Oncology* 93 (2009), pp. 141–146. DOI: 10.1016/j.radonc.2009.06.008.

[2] C. Philippe, L. K. Mien, S. Salar-Behzadi, B. Knäusl, W. Wadsak, R. Dudczak, K. Kletter, H. Viernstein, and M. Mitterhauser. ""Label and go" - A fast and easy radiolabelling method for pellets". *Applied Radiation and Isotopes* 68 (2010), pp. 399–403. DOI: 10.1016/j.apradiso.2009.11.040.

[3] B. Knäusl, A. Hirtl, G. Dobrozemsky, H. Bergmann, K. Kletter, R. Dudczak, and D. Georg. "PET based volume segmentation with emphasis on the iterative TrueX algorithm". *Zeitschrift für Medizinische Physik* 22 (2012), pp. 29–39. DOI: 10.1016/j.zemedi.2010.12.003.

[4] C. Lütgendorf-Caucig, I. Fotina, E. Gallop-Evans, L. Claude, J. Lindh, T. Pelz, B. Knäusl, D. Georg, R. Pötter, and K. Dieckmann. "Multicenter evaluation of different target volume delineation concepts in pediatric Hodgkin's lymphoma. A case study." *Strahlentherapie und Onkologie* 188 (2012), pp. 1025–1030. DOI: 10.1007/s00066-012-0182-4.

[5] J. Hopfgartner, M. Stock, B. Knäusl, and D. Georg. "Robustness of IMPT treatment plans with respect to inter-fractional set-up uncertainties: Impact of various beam arrangements for cranial targets". *Acta Oncologica* 52 (2013), pp. 570–579. DOI: 10.3109/0284186X.2012.744874.

[6] B. Knäusl, C. Lütgendorf-Caucig, J. Hopfgartner, K. Dieckmann, L. Kurch, T. Pelz, R. Pötter, and D. Georg. "Can treatment of pediatric Hodgkin's lymphoma be improved by PET imaging and proton therapy?" *Strahlentherapie und Onkologie* 189 (2013), pp. 54–61. DOI: 10.1007/s00066-012-0235-8.

[7] B. Knäusl, I. F. Rausch, H. Bergmann, R. Dudczak, A. Hirtl, and D. Georg. "Influence of PET reconstruction parameters on the TrueX algorithm. A combined phantom and patient study." *Nuklearmedizin* 52 (2013), pp. 28–35. DOI: 10.3413/Nukmed-0523-12-07.

[8] F. Lohr, D. Georg, L. Cozzi, H. T. Eich, D. C. Weber, J. Koeck, B. Knäusl, and et al. "Novel radiotherapy techniques for involved-field and involved-node treatment of mediastinal Hodgkin lymphoma: when should they be considered and which questions remain open?" *Strahlentherapie und Onkologie* 190 (2014), pp. 864–866, 868–871. DOI: 10.1007/s00066-014-0719-9.

[9] U. Mock, D. Georg, L. Sölkner, C. Suppan, S. M. Vatnitsky, B. Flechl, R. Mayer, K. Dieckmann, and B. Knäusl. "Assessment of improved organ at risk sparing for meningioma: light ion beam therapy as boost versus sole treatment option." *Radiotherapy and Oncology* 111 (2014), pp. 451–456. DOI: 10.1016/j.radonc.2014.05.018.

[10] P. Andrzejewski, P. Kuess, B. Knäusl, K. Pinker, P. Georg, J. Knoth, D. Berger, C. Kirisits, G. Goldner, T. Helbich, R. Pötter, and D. Georg. "Feasibility of dominant intraprostatic lesion boosting using advanced photon-, proton- or brachytherapy." *Radiotherapy and Oncology* 117 (2015), pp. 509–514. DOI: 10.1016/j.radonc.2015.07.028.

[11] J. Gora, P. Kuess, M. Stock, P. Andrzejewski, B. Knäusl, B. Paskeviciute, G. Altorjai, and D. Georg. "ART for head and neck patients: On the difference between VMAT and IMPT." *Acta Oncologica* 54 (2015), pp. 1166–1174. DOI: 10.3109/0284186X.2015.1028590.

[12] T. Layer, M. Blaickner, B. Knäusl, D. Georg, J. Neuwirth, R. P. Baum, C. Schuchardt, S. Wiessalla, and G. Matz. "PET image segmentation using a Gaussian mixture model and Markov random fields." *EJNMMI physics* 2 (2015), p. 9. DOI: 10.1186/s40658-015-0110-7.

[13] B. Knäusl, H. Fuchs, K. Dieckmann, and D. Georg. "Can particle beam therapy be improved using helium ions? - a planning study focusing on pediatric patients." *Acta Oncologica* 11 (2016), pp. 1–9. DOI: 10.3109/0284186X.2015.1125016.

[14] A. Hirtl, H. Bergmann, B. Knäusl, T. Beyer, M. Figl, and J. Hummel. "Technical Note: Fully-automated analysis of Jaszczak phantom measurements as part of routine SPECT quality control". *Medical physics* 44 (2017), pp. 1638–1645. DOI: 10.1002/mp.12150.

[15] N. Kostiukhina, D. Georg, S. Rollet, P. Kuess, A. Sipaj, P. Andrzejewski, H. Furtado, I. Rausch, W. Lechner, E. Steiner, H. Kertész, and B. Knäusl. "Advanced Radiation DOSimetry phantom (ARDOS) - A versatile breathing phantom for 4D radiation therapy and medical imaging". *Physics in Medicine and Biology* 62 (2017), pp. 8136–8153. DOI: 10.1088/1361-6560/aa86ea.

[16] P. Trnková, B. Knäusl, O. Actis, C. Bert, A. Biegun, T. Boehlen, H. Furtado, J. McClelland, S. Mori, I. Rinaldi, A. Rucinski, and A. Knopf. "Clinical implementations of 4D pencil beam scanned particle therapy: Report on the 4D treatment planning workshop 2016 and 2017". *Physica Medica* 54 (2018), pp. 121–130. DOI: 10.1016/j.ejmp.2018.10.002.

[17] M. Clausen, S. Khachonkham, S. Gruber, P. Kuess, R. Seemann, B. Knäusl, E. Mara, H. Palmans, W. Dörr, and D. Georg. "Phantom design and dosimetric characterization for simultaneous cell irradiation with active pencil beam scanning". *Radiation and Environmental Biophysics* 58 (2019), pp. 563–573. DOI: 10.1007/s00411-019-00813-1.

[18] N. Kostiukhina, H. Palmans, M. Stock, D. Georg, and B. Knäusl. "Dynamic lung phantom commissioning for end-to-end 4D dose assessment in proton therapy". *Physics in Medicine and Biology* 64 (2019), p. 235001. DOI: 10.1088/1361-6560/ab5132.

[19] S. Witoszynskyj, P. Andrzejewski, D. Georg, M. Hacker, T. Nyholm, I. Rausch, and B. Knäusl. "Attenuation correction of a flat table top for radiation therapy in hybrid PET/MR using CT- and 68Ge/68Ga transmission scan- based μ-maps". *Physica Medica* 65 (2019), pp. 76–83. DOI: 10.1016/j.ejmp.2019.08.005.

[20] S. Hatamikia, G. Oberoi, E. Unger, G. Kronreif, J. Kettenbach, M. Buschmann, M. Figl, B. Knäusl, F. Moscato, and W. Birkfellner. "Additively Manufactured Patient-Specific Anthropomorphic Thorax Phantom With Realistic Radiation Attenuation Properties". *Frontiers in Bioengineering and Biotechnology* 8 (2020), pp. 1–10. DOI: 10.3389/fbioe.2020.00385.

[21] A. Hranek, A. F. Resch, D. Georg, and B. Knäusl. "Investigation of the Bragg peak degradation caused by homogeneous and heterogeneous lung tissue substitutes : proton beam experiments and comparison to current clinical dose calculation". *Physics in Medicine and Biology* 65 (2020), p. 125015. DOI: 10.1088/1361-6560/abc938.

[22] N. Kostiukhina, H. Palmans, M. Stock, A. Knopf, D. Georg, and B. Knäusl. "Time-resolved dosimetry for validation of 4D dose calculation in PBS proton therapy". *Physics in Medicine and Biology* 65 (2020), p. 125015. DOI: 10.1088/1361-6560/ab8d79.

[23] S. Ruangchan, B. Knäusl, H. Fuchs, D. Georg, and M. Clausen. "Experimental benchmarking of RayStation proton dose calculation algorithms inside and outside the target region in heterogeneous phantom geometries". *Physica Medica* 76 (2020), pp. 182–193. DOI: 10.1016/j.ejmp.2020.07.010.

[24] S. Ruangchan, M. Clausen, H. Palmans, B. Knäusl, and D. Georg. "Dose calculation accuracy in particle therapy : Comparing carbon ions with protons". *Medical Physics* 48 (2021), pp. 7333–7345. DOI: 10.1002/mp.15209.

[25] M. Clausen, S. Ruangchan, H. Palmans, A. Sotoudegan, A. Resch, B. Knäusl, and D. Georg. "Small field proton irradiation for in-vivo studies: potential and limitations when adapting clinical infrastructure". *Zeitschrift für Medizinische Physik* In press (2022). DOI: 10.1016/j.zemedi.2022.10.002.

[26] I. Gulyas, P. Trnkova, B. Knäusl, J. Widder, D. Georg, and A. Renner. "A novel bone suppression algorithm in intensity-based 2D/3D image registration for real-time tumour motion monitoring: development and phantom-based validation". *Medical physics* 49 (2022), pp. 5182–5194. DOI: 10.1002/mp.15716.

[27] B. Knäusl, P. Kuess, M. Stock, D. Georg, P. Fossati, P. Georg, and L. Zimmermann. "Possibilities and challenges when using synthetic computed tomography in an adaptive carbon-ion treatment workflow". *Zeitschrift für Medizinische Physik* In press (2022). DOI: 10.1016/j.zemedi.2022.05.003.

[28] F. Lebbink, M. Stock, D. Georg, and B. Knäusl. "The Influence of Motion on the Delivery Accuracy When Comparing Actively Scanned Carbon Ions versus Protons at a Synchrotron-Based Radiotherapy Facility". *Cancers* 14 (2022), p. 1788. DOI: 10.3390/cancers14071788.

[29] L. Zimmermann, B. Knäusl, M. Stock, C. Lütgendorf-Caucig, D. Georg, and P. Kuess. "Using an MRI sequence independent Convolutional Neural Network for synthetic head CT generation in proton therapy". *Zeitschrift für Medizinische Physik* 32 (2022), pp. 218–227. DOI: 10.1016/j.zemedi.2021.10.003.

[30] M. Buschmann, D. Kauer-Dorner, S. Konrad, D. Georg, J. Widder, and B. Knäusl. "Stereoscopic X-ray image and thermo-optical surface guidance for breast radiotherapy in DIBH". *Strahlentherapie und Onkologie* In press (2023). DOI: 10.1007/s00066-023-02153-y.

[31] B. Knäusl, L. Langgartner, M. Stock, M. Janson, K. M. Furutani, and C. J. Beltran. "Technical note: Requirements for dose calculation on an active scanned proton beamline for small , shallow fields". *Physica Medica* 113 (2023), p. 102659. DOI: 10.1016/j.ejmp.2023.102659.

[32] B. Knäusl, F. Lebbink, P. Fossati, E. Engwall, D. Georg, and M. Stock. "Patient Breathing Motion and Delivery Specifics Influencing the Robustness of a Proton Pancreas Irradiation". *Cancers* 15 (2023), p. 2550. DOI: 10.3390/cancers15092550.

[33] B. Knäusl, V. T. Taasti, P. Poulsen, and L. P. Muren. "Surveying the clinical practice of treatment adaptation and motion management in particle therapy". *Physics and Imaging in Radiation Oncology* (2023), p. 100457. DOI: 10.1016/j.phro.2023.100457.

[34] F. Lebbink, S. Stocchiero, P. Fossati, E. Engwall, D. Georg, M. Stock, and B. Knäusl. "Parameter based 4D dose calculations for proton therapy". *Physics and Imaging in Radiation Oncology* 27 (2023), p. 100473. DOI: 10.1016/j.phro.2023.100473.

[35] C. S. Oria, J. Free, G. G. Marmitt, B. Knäusl, S. Brandenburg, A. C. Knopf, A. Meijers, J. A. Langendijk, and S. Both. "Technical note: flat panel proton radiography with a patient specific imaging field for accurate WEPL assessment." *Medical Physics* 50 (2023), pp. 1756–1765. DOI: 10.1002/mp.16208.

[36] A. Bazani, J. Brunner, S. Russo, A. Carlino, S. Colomar, W. Ikegami Anderson, M. Ciocca, M. Stock, P. Fossati, E. Orlandi, L. Glimelius, S. Molinelli, and B. Knäusl. "Effects of nuclear interaction corrections and trichrome fragment spectra modelling on dose and LET distributions in carbon ion radiotherapy". *Physics and Imaging in Radiation Oncology* In press (2024). DOI: 10.1016/j.phro.2024.100553.

[37] B. Knäusl, G. Belotti, J. Bertholet, J. Daartz, S. Flampouri, M. Hoogeman, A. Knopf, H. Lin, A. Moerman, C. Paganelli, A. Rucinski, R. Schulte, S. Shimizu, K. Stützer, X. Zhang, Y. Zhang, and K. Czerska. "A review of the clinical introduction of 4D particle therapy research concepts ". *Physics and Imaging in Radiation Oncology* 29 (2024), p. 100535. DOI: 10.1016/j.phro.2024.100535.

[38] B. Knäusl and L. Muren. "The role of 4D particle therapy in daily patient care and research". *Physics and Imaging in Radiation Oncology* In press (2024). DOI: 10.1016/j.phro.2024.100560.

Student supervision

Supervised Ph.D. Students

Lorenz Langgartner — *"Dosimetric aspects of image guided pre-clinical ion beam research"* MedUni Wien (ongoing) (Senior supervisor: Univ. Prof. Dr. Dietmar Georg)

Jacob Brunner — *"Development of an end-to-end test workflow for all RAPTOR real-time adaptive PT components"* MedUni Wien (ongoing) (Senior supervisor: Univ. Prof. Dr. Dietmar Georg)

Franciska Lebbink — *"4D dose calculation and beam delivery optimization for moving targets in particle therapy"* MedUni Wien (09/2023) (Senior supervisor: Univ. Prof. Dr. Dietmar Georg)

Co-supervised Ph.D. Students

Carmen Seller Oria — *"Proton radiography for in vivo range verification in adaptive proton therapy"* University of Groningen (01/2023) (Supervisor: Prof. Dr. Stefan Both)

Natalia Kostiukhina — *"4D framework implementation towards investigating ion beam treatment techniques for intra-fractionally moving targets"* MedUni Wien (07/2020) (Supervisor: Univ. Prof. Dr. Dietmar Georg)

(Co-)supervised MSc Students

Joszef Kiss — *"Treatment Plan library for mice irradiations with collimated proton beams"* FH Wiener Neustadt (01/2024)

Maximilian Schramm — *"Dosimetric impact of different materials in collimated kV and proton beams for preclinical research"* FH Wiener Neustadt (06/2023)

Verena Dangl — *"End-to-end measurements and QA procedures for reference irradiation of small animals"* TU Wien (06/2023) (Supervisor: Univ. Prof. Dr. Dietmar Georg)

Arthur Hocke — *"Evaluation of X-ray imaging in the irradiation workflow for glioblastoma patients"* FH Technikum Wien (06/2023)

Lorenz Langgartner — *"Design and Dosimetric Validation of an Irradiation Setup for Preclinical Research with X-rays and Protons"* TU Wien (06/2022) (Supervisor: Univ. Prof. Dr. Dietmar Georg)

Silvia Stocciero — *"Influence of accelerator and breathing variations on the accuracy of 4D dose calculation for liver and pancreas tumors"* University Di Roma (01/2022) (Supervisor: Prof. Riccardo Faccini and Prof. Angelo Schiavi)

Matthieu Manni — *"Simulation of different spot sizes for proton and carbon beams for medical purposes using GATE"* ISIMA, Clermont Auvergne (10/2020)

Andreas Hranek — *"Bragg Peak spot spreading of proton beams within lung tissue"* TU Wien (11/2019) (Supervisor: Univ. Prof. Dr. Dietmar Georg)

Andrea Balz — *"Implementation of adaptive treatment-planning strategies for proton and carbon ion"* TU Wien (11/2018) (Supervisor: Univ. Prof. Dr. Dietmar Georg)

Anna Huber — *"Imaging Ring at MedAustron: Dosimetrical Considerations and Consistency Checks"* FH Wiener Neustadt (06/2017)

Sophie Kianek — *"Alpha scope testing of the Monaco proton treatment planning system"* FH Wiener Neustadt (06/2017)

Gloria Mirescu *"Commissioning of the VERSA HD Linear Accelerator for the RayStation Treatment Planning System with Focus on Fallback Planning"* TU Wien (01/2017) (Supervisor: Univ. Prof. Dr. Dietmar Georg)

Kevin Forstner *"Robust treatment planning concepts for Ependymoma patients"* TU Wien (11/2016) (Supervisor: Univ. Prof. Dr. Dietmar Georg)

Fabian Schiegl *"Robust treatment planning concepts for Ependymoma patients"* FH Technikum (05/2016) (Supervisor: Dr. DI Wolfgang Birkfellner)

Sandra Nemecek *"Monte Carlo versus pencil beam based dose calculation for scanned proton therapy: assessment of optimal calculation and user interface parameters"* TU Wien (11/2015) (Supervisor: Univ. Prof. Dr. Dietmar Georg)

Lukas Sölkner *"Dosimetric comparison of photon, proton and carbon ion therapy for meningioma patients"* TU Wien (10/2013) (Supervisor: Univ. Prof. Dr. Dietmar Georg)

Ivo Rausch *"Investigation of the Characteristics of Reconstruction Algorithms in Positron Emission Tomography"* TU Wien (12/2011) (Supervisor: Univ. Prof. Dr. Dietmar Georg)