

# Georg SCHRAMM

Hollestraat 20 bus 0202  
3001 Heverlee, Belgium  
☎ +49 176 23483403  
✉ [georg.schramm@posteo.net](mailto:georg.schramm@posteo.net)  
📁 [joris.uber.space](#)

---

## Personal Details

date of birth	08 April 1987
place of birth	Görlitz, Germany
nationality	German

---

## Education

Jan 2015	<b>PhD in medical imaging</b> , TU Dresden, Germany. Thesis: "Evaluation and Improvement of MR-based attenuation correction in PET/MRI." final mark: summa cum laude, <a href="#">link (German National Library)</a>
Apr 2011	<b>Master in (nuclear and particle) physics</b> , TU Dresden, Germany. Thesis: "Simulation and analysis of neutron capture and photon scattering experiments."

---

## Experiences

since Apr 2015	<b>Postdoctoral researcher</b> , KU Leuven, Belgium, Department of Imaging and Pathology, Division of Nuclear Medicine. As a PostDoc in the lab of Prof. Johan Nuyts, I am investigating joint advanced method for iterative PET image reconstruction and the application of deep learning in PET reconstruction and image analysis. Moreover, I am heavily interested and involved in the translation of our research into clinical routine.
Jan 2015 - Mar 2015	<b>Scientist</b> , Helmholtz-Zentrum Dresden-Rossendorf (HZDR), Institute for Radiopharmaceutical Cancer Research.
May 2011 - Jan 2015	<b>PhD student</b> , HZDR, Institute for Radiopharmaceutical Cancer Research. As a PhD student in the lab of Prof. Jörg van den Hoff, I was evaluating and improving whole-body MR-based attenuation correction using one of the first combined PET/MR systems world-wide.
2021	<b>Member of the local organizing committee for the 16th Virtual International Meeting on Fully 3D Image Reconstruction in Radiology and Nuclear Medicine.</b> As a member of the organizing committee, I was responsible for organizing the virtual poster session on <a href="#">gather.town</a> as well as editing the conference proceedings submitted to <a href="#">arxiv</a>
since Apr 2019	<b>Active member in the KU Leuven PostDoc Society.</b> I am involved in organizing career and networking events for PostDocs and in the preparation of a PostDoc charta for KU Leuven.
Apr 2013 - Feb 2015	<b>member of the management board of Werkstatt BigBand Dresden e.V.</b> In our student big band, I was organizing concerts, rehearsal weekends and finances.
Sep 2009 - Mar 2010	<b>Semester abroad</b> , University of Sheffield, UK. During my Erasmus semester in Sheffield, I was studying astronomy and applied mathematics
Aug 2008 - Jul 2009	<b>Student research assistant</b> , HZDR Institute of Radiation Physics. As an assistant, I was analysing neutron TOF and transmission data and typesetting a lecture manuscript in latex.

---

## Languages

German	native
English	fluent
Dutch	basic

---

## Teaching

since 2017      Techniques and technologies in Nuclear Medicine (assistant for Prof. J. Nuyts)  
since 2017      Medical Imaging (assistant for Prof. P. Suetens and Prof. F. Maes)

---

## Awards

Nov 2019      **Best Poster Award 2nd place.**  
Synergistic Reconstruction Symposium, Chester

Mar 2015      **PhD Award.**  
Yearly award for the best PhD thesis at HZDR

Mar 2014      **Award for notable achievements in nuclear medicine imaging.**  
German Society of Nuclear Medicine

Mar 2014      **Travel grant for RSNA 2014 for the best oral presentation of a young investigator.**  
Annual meeting of the German Society of Nuclear Medicine

May 2012      **Award for the best oral presentation of a young investigator.**  
International conference on PET/MRI and SPECT/MRI. La Biodola, Italy

Jan 2012      **Ehrenfried Walter von Tschirnhaus Urkunde.**  
Yearly given to the five best graduates of the faculty of science at TU Dresden

---

## Invited Talks

Nov 2019      **State of the art of AI for medical image reconstruction and corrections.**  
IEEE MIC 2019 workshop: Emergence and perspectives of artificial intelligence (AI) methods in radiation-based imaging sciences, Manchester

Oct 2017      **MR-based attenuation correction for the body.**  
Annual congress of the European Association for Nuclear Medicine, Vienna

Sep 2017      **Positron Emission Tomography - an introduction and overview about current developments.**  
International workshop on positron studies on defects 2017, Dresden

---

## Research Interests

PET      PET image reconstruction  
quantitative PET imaging  
PET image analysis  
hybrid PET/MR imaging  
Deep learning in medical image reconstruction and analysis

Reviewer for      J Nucl Med, Eur J Nucl Med, IEEE TMI, Eur J Nucl Med Phys

---

## Skills

programming      Python, keras, tensorflow, pytorch, IDL, matlab, R, C, C++, bash, git, cmake, openmp, cuda,  
[github link](#)

mathematics      numerics, inverse problems and convex optimization in medical imaging

clinical PET imaging      more than 8 years of experience in clinical operation of a PET/MRI scanner

Leuven, January 28, 2022

---

## Publication records

Google scholar profile [link](#)

ORCID ID [link](#)

---

## First author peer-reviewed journal articles

G Schramm, D Rigie, T Vahle, A Rezaei, K Van Laere, T Shepherd, J Nuyts, F Boada

*Approximating anatomically-guided PET reconstruction in image space using a convolutional neural network*  
NEUROIMAGE 224 [DOI link](#) (2021)

G Schramm, M Koole, S Willekens, A Rezaei, D Van Weehaeghe, G Delso, R Peeters, N Mertens, J Nuyts, K Van Laere  
*Regional Accuracy of ZTE-Based Attenuation Correction in Static [18F]FDG and Dynamic [18F]PE2I Brain PET/MR*  
Frontiers In Physics 7:1–11 [DOI link](#) (2019)

G Schramm, M Holler, A Rezaei, K Vunckx, F Knoll, K Bredies, F Boada, J Nuyts  
*Evaluation of Parallel Level Sets and Bowsher's Method as Segmentation- Free Anatomical Priors for Time-of-Flight PET Reconstruction*  
IEEE TRANSACTIONS ON MEDICAL IMAGING 37:590–603 [DOI link](#) (2018)

G Schramm, J Maus, F Hofheinz, J Petr, A Lougovski, B Beuthien-Baumann, L Oehme, I Platzek, J van den Hoff  
*Correction of quantification errors in pelvic and spinal lesions caused by ignoring higher photon attenuation of bone in [F-18]NaF PET/MR*  
Medical Physics 42:6468–6476 (2015)

G Schramm, J Maus, F Hofheinz, J Petr, A Lougovski, B Beuthien-Baumann, I Platzek, J van den Hoff  
*Evaluation and automatic correction of metal-implant-induced artifacts in MR-based attenuation correction in whole-body PET/MR imaging*  
Physics in Medicine and Biology 59:2713–2726 (2014)

G Schramm, J Langner, F Hofheinz, J Petr, A Lougovski, B Beuthien-Baumann, I Platzek, J van den Hoff  
*Influence and Compensation of Truncation Artifacts in MR-Based Attenuation Correction in PET/MR*  
IEEE Transactions on Medical Imaging 32:2056–2063 (2013)

G Schramm, J Langner, F Hofheinz, J Petr, B Beuthien-Baumann, I Platzek, J Steinbach, J Kotzerke, J van den Hoff  
*Quantitative accuracy of attenuation correction in the Philips Ingenuity TF whole-body PET/MR system: a direct comparison with transmission-based attenuation correction*  
Magnetic Resonance Materials in Biology, Physics and Medicine 26:115–126 (2012)

G Schramm, R Massarczyk, A Junghans, T Belgia, R Beyer, E Birgersson, E Grosse, M Kempe, Z Kis, K Kosev, M Krticka, A Matic, K Schilling, R Schwengner, L Szentmiklosi, A Wagner, J Weil  
*Dipole strength in Se-78 below the neutron separation energy from a combined analysis of Se-77( $n, \gamma$ ) and Se-78( $\gamma, \gamma'$ ) experiments*  
Physical Review C 85:0143111–01431114 (2012)

G Schramm, C Ladefoged  
*Metal artifact correction strategies in MRI-based attenuation correction in PET/MRI*  
BJR|Open 1 [DOI link](#) ()

---

## Last author peer-reviewed journal articles

A Reader, G Schramm

*Artificial Intelligence for PET Image Reconstruction*  
JOURNAL OF NUCLEAR MEDICINE 62:1330–1333 (2021)

---

## Co-author peer-reviewed journal articles

L Seldeslachts, C Cawthorne, S Kaptein, R Boudewijns, H Thibaut, L Sanchez Felipe, S Sharma, G Schramm, B Weynand, K Dallmeier, G Vande Velde  
*Use of Micro-Computed Tomography to Visualize and Quantify COVID-19 Vaccine Efficiency in Free-Breathing Hamsters.*  
Methods Mol Biol 2410:177–192 [DOI link](#) (2022)

G Degtiarova, P Claus, J Duchenne, G Schramm, J Nuyts, J Bogaert, G Vöros, R Willems, H Verberne, J Voigt, O Gheysens  
*Can nuclear imaging accurately detect scar in ischemic cardiac resynchronization therapy candidates?*  
Nucl Med Commun [DOI link](#) (2022)

M Vergara, A Rezaei, G Schramm, M Rodriguez-Alvarez, J Baviera, J Nuyts  
*2-D Feasibility Study of Joint Reconstruction of Attenuation and Activity in Limited Angle TOF-PET*  
IEEE TRANSACTIONS ON RADIATION AND PLASMA MEDICAL SCIENCES 5:712–722 [DOI link](#) (2021)

J van Aalst, M Devrome, D Van Weehaeghe, A Rezaei, A Radwan, G Schramm, J Ceccarini, S Sunaert, M Koole, K Van Laere  
*Regional glucose metabolic decreases with ageing are associated with microstructural white matter changes: a simultaneous PET/MR study*  
EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING [DOI link](#) (2021)

D Schaart, G Schramm, J Nuyts, S Surti

*Time of Flight in Perspective: Instrumental and Computational Aspects of Time Resolution in Positron Emission Tomography*  
IEEE Transactions on Radiation and Plasma Medical Sciences 5:598–618 [DOI link](#) (2021)

A Rezaei, M Spangler-Bickell, G Schramm, K Van Laere, J Nuyts, M Defrise

*Rigid motion tracking using moments of inertia in TOF-PET brain studies*  
PHYSICS IN MEDICINE AND BIOLOGY 66 [DOI link](#) (2021)

S Meikle, V Sossi, E Roncali, S Cherry, R Banati, D Mankoff, T Jones, M James, J Sutcliffe, J Ouyang, Y Petibon, C Ma, G El Fakhri, S Surti, J Karp, R Badawi, T Yamaya, G Akamatsu, G Schramm, A Rezaei, J Nuyts, R Fulton, A Kyme, C Lois, H Sari, J Price, R Boellaard, R Jeraj, D Bailey, E Eslick, K Willowson, J Dutta

*Quantitative PET in the 2020s: a roadmap*  
PHYSICS IN MEDICINE AND BIOLOGY 66 [DOI link](#) (2021)

D Van Weehaeghe, S Babu, J De Vocht, N Zurcher, S Chew, C Tseng, M Loggia, M Koole, A Rezaei, G Schramm, P Van Damme, J Hooker, K Van Laere, N Atassi

*Moving Toward Multicenter Therapeutic Trials in Amyotrophic Lateral Sclerosis: Feasibility of Data Pooling Using Different Translocator Protein PET Radioligands*  
JOURNAL OF NUCLEAR MEDICINE 61:1621–1627 [DOI link](#) (2020)

D Van Weehaeghe, M Devrome, G Schramm, J De Vocht, W Deckers, K Baete, P Van Damme, M Koole, K Van Laere

*Combined brain and spinal FDG PET allows differentiation between ALS and ALS mimics*  
EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING 47:2681–2690 [DOI link](#) (2020)

J van Aalst, J Ceccarini, G Schramm, D Van Weehaeghe, A Rezaei, K Demyttenaere, S Sunaert, K Van Laere

*Long-term Ashtanga yoga practice decreases medial temporal and brainstem glucose metabolism in relation to years of experience*  
EJNMMI RESEARCH 10 [DOI link](#) (2020)

Y Tsai, G Schramm, S Ahn, A Bousse, S Arridge, J Nuyts, B Hutton, C Stearns, K Thielemans

*Benefits of Using a Spatially-Variant Penalty Strength With Anatomical Priors in PET Reconstruction*  
IEEE TRANSACTIONS ON MEDICAL IMAGING 39:11–22 [DOI link](#) (2020)

X Tang, E Jafarholi Rangraz, W Coudyzer, J Bertels, D Robben, G Schramm, W Deckers, G Maleux, K Baete, C Verslype, M Gooding, C Deroose, J Nuyts

*Whole liver segmentation based on deep learning and manual adjustment for clinical use in SIRT*  
EUROPEAN JOURNAL OF NUCLEAR MEDICINE AND MOLECULAR IMAGING 47:2742–2752 [DOI link](#) (2020)

A Rezaei, G Schramm, K Van Laere, J Nuyts

*Estimation of Crystal Timing Properties and Efficiencies for the Improvement of (Joint) Maximum-Likelihood Reconstructions in TOF-PET.*  
IEEE Trans Med Imaging 39:952–963 [DOI link](#) (2020)

G Poma, F Garibaldi, F Giuliani, T Insero, M Lucentini, A Marcucci, P Musico, J Nuyts, F Santavenere, G Schramm, C Suter, E Cisbani

*Limited Angle Tomography reconstruction for non-standard MBI system by means of parallel-hole and pinhole optics*  
JOURNAL OF INSTRUMENTATION 15 [DOI link](#) (2020)

J De Vocht, J Blommaert, M Devrome, A Radwan, D Van Weehaeghe, M De Schaepdryver, J Ceccarini, A Rezaei, G Schramm, J van Aalst, A Chiò, M Pagani, D Stam, H Van Esch, N Lemaire, M Verhaegen, N Mertens, K Poesen, L van den Berg, M van Es, R Vandenberghe, M Vandenbulcke, J Van den Stock, M Koole, P Dupont, K Van Laere, P Van Damme

*Use of Multimodal Imaging and Clinical Biomarkers in Presymptomatic Carriers of C9orf72 Repeat Expansion*  
Jama Neurology 77:1008–1017 [DOI link](#) (2020)

R Boudewijns, H Thibaut, S Kaptein, R Li, V Vergote, L Seldeslachts, J Van Weyenberg, C De Keyser, L Bervoets, S Sharma, L Liesenborghs, J Ma, S Jansen, D Van Looveren, T Vercruysse, X Wang, D Jochmans, E Martens, K Roose, D De Vlieger, B Schepens, T Van Buyten, S Jacobs, Y Liu, J MARTI CARRERAS, B Vanmechelen, T Wawina, L Delang, J Rocha-Pereira, L Coelmont, J Chiu, P Leyssen, E Heylen, D Schols, L Wang, L Close, J Matthijnsens, M Van Ranst, V Compennolle, G Schramm, K Van Laere, X Saelens, N Callewaert, G Opdenakker, P Maes, B Weynand, C Cawthorne, G Vande Velde, Z Wang, J Neyts, K Dallmeier

*STAT2 signaling restricts viral dissemination but drives severe pneumonia in SARS-CoV-2 infected hamsters*  
Nature Communications 11:5838–5838 [DOI link](#) (2020)

A Rezaei, G Schramm, S Willekens, G Delso, K Van Laere, J Nuyts

*A Quantitative Evaluation of Joint Activity and Attenuation Reconstruction in TOF PET/MR Brain Imaging*  
JOURNAL OF NUCLEAR MEDICINE 60:1649–1655 [DOI link](#) (2019)

F Hofheinz, J Maus, S Zschaek, J Rogasch, G Schramm, L Oehme, I Apostolova, J Kotzerke, J van den Hoff

*Interobserver variability of image-derived arterial blood SUV in whole-body FDG PET*  
EJNMMI RESEARCH 9 [DOI link](#) (2019)

G Degtiarova, P Claus, J Duchenne, M Cvijic, G Schramm, J Nuyts, J Voigt, O Gheysens

*Low septal to lateral wall F-18-FDG ratio is highly associated with mechanical dyssynchrony in non-ischemic CRT candidates*  
EJNMMI RESEARCH 9 [DOI link](#) (2019)

G Degtiarova, P Claus, J Duchenne, G Schramm, J Nuyts, H Verberne, J Voigt, O Gheysens

*Impact of left bundle branch block on myocardial perfusion and metabolism: A positron emission tomography study*  
JOURNAL OF NUCLEAR CARDIOLOGY 28:1730–1739 [DOI link](#) (2019)

- I Platzek, B Beuthien-Baumann, G Schramm, J Maus, M Laniado, J Kotzerke, J van den Hoff, M Schuler  
*FDG PET/MR in initial staging of sarcoma: Initial experience and comparison with conventional imaging*  
CLINICAL IMAGING 42:126–132 [DOI link](#) (2017)
- R Wodtke, G Schramm, J Pietzsch, M Pietsch, R Loeser  
*Synthesis and Kinetic Characterisation of Water-Soluble Fluorogenic Acyl Donors for Transglutaminase 2*  
CHEMBIOCHEM 17:1263–1281 [DOI link](#) (2016)
- J Petr, I Platzek, A Seidlitz, H Mutsaerts, F Hofheinz, G Schramm, J Maus, B Beuthien-Baumann, M Krause, J van den Hoff  
*Early and late effects of radiochemotherapy on cerebral blood flow in glioblastoma patients measured with non-invasive perfusion MRI*  
Radiotherapy and Oncology 118:24–28 (2016)
- R Massarczyk, G Schramm, T Belgys, R Schwengner, R Beyer, D Bemmerer, Z Elekes, E Grosse, R Hannaske, A Junghans, Z Kis, T Koegler, C Lorenz, K Schmidt, L Szentmiklosi, A Wagner, J Weil  
*Role of electric and magnetic dipole strength functions in the Cd-114( $\gamma, \gamma'$ ) and Cd-113( $n, \gamma$ ) reactions*  
Physical Review C 93:0143011 (2016)
- J Maus, G Schramm, F Hofheinz, L Oehme, A Lougovski, J Petr, I Platzek, B Beuthien-Baumann, J Steinbach, J Kotzerke, J van den Hoff  
*Evaluation of in vivo quantification accuracy of the Ingenuity-TF PET/MR*  
Medical Physics 42:5773–5781 (2015)
- A Lougovski, F Hofheinz, J Maus, G Schramm, J van den Hoff  
*On the relation between Kaiser-Bessel blob and tube of response based modelling of the system matrix in iterative PET image reconstruction*  
Physics in Medicine and Biology 60:4209–4224 (2015)
- J van den Hoff, A Lougovski, G Schramm, J Maus, L Oehme, J Petr, B Beuthien-Baumann, J Kotzerke, F Hofheinz  
*Correction of scan time dependence of standard uptake values in oncological PET*  
EJNMMI Research 4:1–14 (2014)
- I Platzek, B Beuthien-Baumann, R Ordemann, J Maus, G Schramm, H Kitzler, M Laniado, J Kotzerke, J van den Hoff  
*FDG PET/MR for the Assessment of Lymph Node Involvement in Lymphoma: Initial Results and Role of Diffusion-Weighted MR*  
Academic Radiology 21:1314–1319 (2014)
- I Platzek, B Beuthien-Baumann, M Schneider, V Gudziol, H Kitzler, J Maus, G Schramm, M Popp, M Laniado, J Kotzerke, J van den Hoff  
*FDG PET/MR for lymph node staging in head and neck cancer*  
European Journal of Radiology 83:1163–1168 (2014)
- J Maus, F Hofheinz, G Schramm, L Oehme, B Beuthien-Baumann, M Lukas, R Buchert, J Steinbach, J Kotzerke, J van den Hoff  
*Evaluation of PET quantification accuracy in vivo Comparison of measured FDG concentration in the bladder with urine samples*  
Nuclear-Medizin 53:67–77 (2014)
- R Massarczyk, R Schwengner, F Doenau, S Frauendorf, M Anders, D Bemmerer, R Beyer, C Bhatia, E Birgersson, M Butterling, Z Elekes, A Ferrari, M Gooden, R Hannaske, A Junghans, M Kempe, J Kelley, T Koegler, A Matic, M Menzel, S Mueller, T Reinhardt, M Roeder, G Rusev, K Schilling, K Schmidt, G Schramm, A Tonchev, W Tornow, A Wagner  
*Nuclear Deformation and Neutron Excess as Competing Effects for Dipole Strength in the Pygmy Region*  
Physical Review Letters 112:0725011–0725015 (2014)
- A Lougovski, F Hofheinz, J Maus, G Schramm, E Will, J van den Hoff  
*A volume of intersection approach for on-the-fly system matrix calculation in 3D PET image reconstruction*  
Physics in Medicine and Biology 59:561–577 (2014)
- I Apostolova, J Rogasch, R Buchert, H Wertzel, H Achenbach, J Schreiber, S Riedel, C Furth, A Lougovski, G Schramm, F Hofheinz, H Amthauer, I Steffen  
*Quantitative assessment of the asphericity of pretherapeutic FDG uptake as an independent predictor of outcome in NSCLC*  
BMC CANCER 14 [DOI link](#) (2014)
- J van den Hoff, L Oehme, G Schramm, J Maus, A Lougovski, J Petr, B Beuthien-Baumann, F Hofheinz  
*The PET-derived tumor-to-blood standard uptake ratio (SUR) is superior to tumor SUV as a surrogate parameter of the metabolic rate of FDG*  
EJNMMI Research 3:77–84 [DOI link](#) (2013)
- J van den Hoff, F Hofheinz, L Oehme, G Schramm, J Langner, B Beuthien-Baumann, J Steinbach, J Kotzerke  
*Dual time point based quantification of metabolic uptake rates in F-18-FDG PET*  
EJNMMI Research 3:16–26 [DOI link](#) (2013)
- I Platzek, B Beuthien-Baumann, M Schneider, V Gudziol, J Langner, G Schramm, M Laniado, J Kotzerke, J van den Hoff  
*PET/MRI in head and neck cancer: initial experience*  
European Journal of Nuclear Medicine and Molecular Imaging 40:6–11 (2013)
- J Petr, G Schramm, F Hofheinz, J Langner, J van den Hoff  
*Modeling Magnetization Transfer Effects of Q2TIPS Bolus Saturation in Multi-T1 Pulsed Arterial Spin Labeling*  
Magnetic Resonance in Medicine 72:1007–1014 (2013)

R Massarczyk, G Schramm, A Junghans, R Schwengner, M Anders, T Belgya, R Beyer, E Birgersson, A Ferrari, E Grosse, R Hannaske, Z Kis, T Koegler, K Kosev, M Marta, L Szentmiklosi, A Wagner, J Weil  
*Electromagnetic dipole strength up to the neutron separation energy from Pt-196( $\gamma$ ,  $\gamma$ ) and Pt-195(n,  $\gamma$ ) reactions*  
Physical Review C 87:0443061–0443069 (2013)

R Hannaske, Z Elekes, R Beyer, A Junghans, D Bemmerer, E Birgersson, A Ferrari, E Grosse, M Kempe, T Kögler, M Marta, R Massarczyk, A Matic, G Schramm, R Schwengner, A Wagner  
*Neutron total cross section measurements of gold and tantalum at the nELBE photoneutron source*  
European Physical Journal A 49:1–11 [DOI link](#) (2013)

I Platzek, B Beuthien-Baumann, J Langner, M Popp, G Schramm, R Ordemann, M Laniado, J Kotzerke, J van den Hoff  
*PET/MR for therapy response evaluation in malignant lymphoma: initial experience*  
Magnetic Resonance Materials in Biology, Physics and Medicine 26:49–55 (2012)

J Petr, G Schramm, F Hofheinz, J Langner, J van den Hoff  
*Partial Volume Correction in Arterial Spin Labeling Using a Look-Locker Sequence*  
Magnetic Resonance in Medicine 70:1535–1543 (2012)

R Massarczyk, R Schwengner, F Doenau, E Litvinova, G Rusev, R Beyer, R Hannaske, A Junghans, M Kempe, J Kelley, T Koegler, K Kosev, E Kwan, M Marta, A Matic, C Nair, R Raut, K Schilling, G Schramm, D Stach, A Tonchev, W Tornow, E Trompler, A Wagner, D Yakorev  
*Electromagnetic dipole strength of Ba-136 below the neutron separation energy*  
Physical Review C 86:0143191–01431913 (2012)

B Beuthien-Baumann, I Platzek, I Lauterbach, J van den Hoff, G Schramm, K Zoephel, M Laniado, J Kotzerke  
*Improved anatomic visualization of a glomus caroticum tumour within the carotic bifurcation with combined Ga-68-DOTATATE PET/MRI*  
European Journal of Nuclear Medicine and Molecular Imaging 39:1087–1088 (2012)

R Beyer, E Birgersson, A Junghans, R Massarczyk, G Schramm, R Schwengner, E Grosse  
*ELECTROMAGNETIC STRENGTH IN HEAVY NUCLEI - EXPERIMENTS AND A GLOBAL FIT*  
International Journal of Modern Physics E, Nuclear Physics 20:431–442 (2011)

---

## Conference proceedings

A Rezaei, T Deller, K Wangerin, G Schramm, F Jansen, K Van Laere, J Nuyts  
*Maximum Likelihood Estimation of the Geometric Sensitivities in PET*  
IEEE Nuclear Science Symposium (NSS) and Medical Imaging Conference (MIC) (2019)

R Heylen, G Schramm, P Suetens, J Nuyts  
*4D CBCT reconstruction with TV regularization on a dynamic software phantom*  
IEEE Nuclear Science Symposium / Medical Imaging Conference (NSS/MIC) (2019)

G Schramm, A Koole, F Boada, K van Laere, J Nuyts  
*An approach for a reconstruction-derived whole-blood arterial input function (RDIF) in PET/MRI*  
IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) / 25th International Symposium on Room-Temperature Semiconductor X-Ray and Gamma-Ray Detectors (2018)

D Rigue, G Schramm, T Vahle, T Shepherd, J Nuyts, F Boada  
*Approximating MRI-Based Anatomically Guided PET Reconstruction with a Convolutional Neural Network*  
IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) / 25th International Symposium on Room-Temperature Semiconductor X-Ray and Gamma-Ray Detectors (2018)

A Rezaei, G Schramm, K Van Laere, J Nuyts  
*Estimation of crystal timings in TOF-PET*  
IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) / 25th International Symposium on Room-Temperature Semiconductor X-Ray and Gamma-Ray Detectors (2018)

J De Ro, G Schramm, J Nuyts  
*Evaluation of region-of-interest-based brain PET reconstruction*  
IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) / 25th International Symposium on Room-Temperature Semiconductor X-Ray and Gamma-Ray Detectors (2018)

Y Tsai, G Schramm, J Nuyts, S Ahn, C Stearns, A Bousse, S Arridge, K Thielemans  
*Spatially-variant Strength for Anatomical Priors in PET Reconstruction*  
IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) / 24th International Symposium on Room-Temperature Semiconductor X-Ray and Gamma-Ray Detectors (2017)

A Rezaei, G Schramm, K Van Laere, J Nuyts  
*Data driven time alignment for TOF-PET*  
IEEE Nuclear Science Symposium and Medical Imaging Conference (NSS/MIC) / 24th International Symposium on Room-Temperature Semiconductor X-Ray and Gamma-Ray Detectors (2017)

G Schramm, M Holler, T Koesters, F Boada, F Knoll, K Bredies, J Nuyts

*PET Reconstruction with Non-smooth Gradient-based Priors*

IEEE Nuclear Science Symposium / Medical Imaging Conference / Room-Temperature Semiconductor Detector Workshop (NSS/MIC/RTSD) (2016)

R Hannaske, D Bemmerer, R Beyer, E Birgersson, A Ferrari, E Grosse, A Junghans, M Kempe, T Koegler, K Kosev, M Marta, R Massarczyk, A Matic, K Schilling, G Schramm, R Schwengner, A Wagner, D Yakorev

*Measurement of the photodissociation of the deuteron at energies relevant to Big Bang nucleosynthesis*

6th Nuclear Physics in Astrophysics Conference (NPA) [DOI link](#) (2016)

R Massarczyk, R Schwengner, D Bemmerer, R Beyer, R Hannaske, A Junghans, M Kempe, T Koegler, G Schramm, A Wagner

*Investigation of dipole strength up to the neutron separation energy at gamma ELBE*

15th International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics (CGS) [DOI link](#) (2015)

T Belgia, R Massarczyk, L Szentmiklosi, G Schramm, R Schwengner, A Junghans, A Wagner, E Grosse

*Combined study of the gamma-ray strength function of Cd-114 with (n,gamma) and (gamma,gamma') reactions*

15th International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics (CGS) [DOI link](#) (2015)

R Schwengner, R Beyer, A Junghans, R Massarczyk, G Schramm, D Bemmerer, E Birgersson, A Ferrari, E Grosse, R Hannaske, M Kempe, T Koegler, A Matic, K Schilling, A Wagner, G Rusev, A Makinaga, T Belgia, Z Kis, L Szentmiklosi, J Weil, F Becvar, M Krucka

*EXPERIMENTS WITH NEUTRONS AND PHOTONS AT ELBE*

14th International Symposium on Capture Gamma-Ray Spectroscopy and Related Topics (CGS) (2013)

R Massarczyk, G Schramm, E Birgersson, R Schwengner, E Grosse, A Junghans, A Wagner

*Investigation of dipole strength at the ELBE accelerator in Dresden-Rossendorf*

3rd International Workshop on Compound Nuclear Reactions and Related Topics (CNR) [DOI link](#) (2012)

E Grosse, A Junghans, R Massarczyk, R Schwengner, G Schramm

*Description of dipole strength in heavy nuclei in conformity with their quadrupole degrees of freedom*

3rd International Workshop on Compound Nuclear Reactions and Related Topics (CNR) [DOI link](#) (2012)

R Massarczyk, E Birgersson, G Schramm, R Schwengner, T Belgia, R Beyer, E Grosse, R Hannaske, A Junghans, A Matic, L Szentmiklosi, J Weil, A Wagner

*Photon strength function deduced from photon scattering and neutron capture*

EFNUDAT Users and Collaboration Workshop on Measurements and Models of Nuclear Reactions [DOI link](#) (2010)

E Grosse, A Junghans, F Becvar, E Birgersson, R Massarczyk, G Schramm

*Photon strength in spherical and deformed heavy nuclei*

EFNUDAT Users and Collaboration Workshop on Measurements and Models of Nuclear Reactions [DOI link](#) (2010)

A Ferrari, R Beyer, E Birgersson, J Claussner, E Grosse, R Hannaske, A Junghans, M Kempe, T Koegler, R Massarczyk, A Matic, K Schilling, G Schramm, R Schwengner, A Wagner, F Weiss, D Yakorev

*Optimization aspects of the new nELBE photo-neutron source*

EFNUDAT Users and Collaboration Workshop on Measurements and Models of Nuclear Reactions [DOI link](#) (2010)