

Gastao Lima da Cruz, PhD
Assistant Research Scientist
MIITT (Michigan Institute of Imaging Technology and
Translation) Member
1301 Catherine St., Ann Arbor, MI 48109
734-615-4305 - glimadac@umich.edu

Education and Training

Education

01/2008-01/2011	BSc, Physics, University of Porto, Porto, Portugal
01/2011-01/2012	MSc, Physics and Engineering in Medicine, University College London, London, United Kingdom
01/2013-01/2016	PhD, King's College London, London, United Kingdom

Work Experience

Academic Appointment

01/2016-01/2022	Postdoctoral Research Associate, School of Biomedical Engineering and Imaging Sciences, King's College London, London, England
01/2022-Present	Assistant Research Scientist, Radiology, University of Michigan, Ann Arbor, MI

Patents / Disclosures

Disclosure

Granted

MR Fingerprinting with a Deep Image Prior Reconstruction for Combined T1, T2, and M0 Mapping and Multi-Contrast Cine Imaging, Author, Hamilton J, **Lima da Cruz G**, Rashid I, Rajagopalan S, Seiberlich N, 11/22/2022

Improved T1, T2 and PDFF mapping with rosette MRF using virtual-coil + low-rank + patch-based regularization, Author, **Lima da Cruz G**, Liu Y, Cummings E, Hamilton J, Gulani V, Seiberlich N, 11/28/2022

Honors and Awards

International

2014	Magna Cum Laude, International Society for Magnetic Resonance in Medicine
2016	Summa Cum Laude, International Society for Magnetic Resonance in Medicine
2018 - 2019	Co-author of top 100 downloaded articles, Magnetic Resonance in Medicine, Co-author in six (two as first author) of top 100 downloaded Magnetic Resonance in Medicine articles
2020	Summa Cum Laude, International Society for Magnetic Resonance in Medicine
2021	Magna Cum Laude, International Society for Magnetic Resonance in Medicine

Teaching

Mentorship

Postdoctoral Fellow

01/2017-01/2020 Olivier Jaubert, King's College, London, Currently a Postdoc at University College, London

Graduate Student

01/2016-01/2016 Ahmed Berradia, King's College, London, Received degree

01/2020-01/2020 Talent Fong, King's College, London, Received degree

01/2021-01/2021 Lucas Bergsma, King's College, London, Received degree

Undergraduate Student

01/2015-01/2015 Tatiana Costa, King's College, London, Received degree

01/2019-01/2019 Talent Fong, King's College, London, Received degree

Teaching Activity

International

01/2017-01/2020 Simultaneous PET-MR course, MR lecture, Kings College, London (St. Thomas Hospital)

01/2018-01/2018 CMR level 2 course on Parallel Imaging, Kings College, London (St. Thomas Hospital)

01/2018-01/2021 CMR level 1 course on CMR Sequences, Kings College, London (St. Thomas Hospital)

Institutional

01/2014-01/2014 Computer programming (BSc module), King's College London

01/2015-01/2021 MR reconstruction (PhD module), King's College London

01/2016-01/2021 Image processing (BSc module), King's College London

01/2016-01/2021 Imaging with Non-Ionizing Radiation (MSc module), King's College London

01/2018-01/2021 MR acquisition (PhD module), King's College London

Scholarly Activities

Presentations

Intramural Invited Presentation

Speaker

1. Parallel Imaging, **Lima da Cruz G**, CMR level 2 course on Parallel Imaging, King's College, 01/2018, London, England
2. CMR Sequences, **Lima da Cruz G**, CMR level 1 course on CMR sequences, King's College, 01/2018, London, England

Publications/Scholarship

(Co-First Author *; Corresponding author **; Co-Last author ***)

Peer-Reviewed

Journal Article

1. Hamilton J, **Lima da Cruz G**, Rashid I, Walker J, Rajagopalan S, Seiberlich N: Deep Image Prior Cine MR Fingerprinting with B1+ Spin History Correction. *Magnetic Resonance in Medicine*.PM38098428

2. Drobnjak I, **Lima da Cruz G**, Alexander DC: Optimising Oscillating Waveform-Shape for Pore Size Sensitivity in Diffusion-Weighted MR. *Microporous and Mesoporous Materials*.178: 11-14, 09/2013
3. **Cruz G**, Atkinson D, Buerger C, Schaeffter T, Prieto C: Accelerated motion corrected three-dimensional abdominal MRI using total variation regularized SENSE reconstruction. *Magn Reson Med*.75 (4): 1484-1498, 04/2016. PM25996443
4. **Cruz G**, Atkinson D, Henningsson M, Botnar RM, Prieto C: Highly efficient nonrigid motion-corrected 3D whole-heart coronary vessel wall imaging. *Magn Reson Med*.77(5): 1894-1908, 05/2017. PM27221073
5. Usman M, Ruijsink B, Nazir MS, **Cruz G**, Prieto C: Free breathing whole-heart 3D CINE MRI with self-gated Cartesian trajectory. *Magn Reson Imaging*.38: 129-137, 05/2017. PM28034638
6. **Cruz G**, Schneider T, Bruijnen T, Gaspar AS, Botnar RM, Prieto C: Accelerated magnetic resonance fingerprinting using soft-weighted key-hole (MRF-SOHO). *PLoS One*.13(8): e0201808, 01/2018. PM30092033
7. Correia T, **Cruz G**, Schneider T, Botnar RM, Prieto C: Technical note: Accelerated nonrigid motion-compensated isotropic 3D coronary MR angiography. *Med Phys*.45(1): 214-222, 01/2018. PM29131353
8. Munoz C, Neji R, **Cruz G**, Mallia A, Jeljeli S, Reader AJ, Botnar RM, Prieto C: Motion-corrected simultaneous cardiac positron emission tomography and coronary MR angiography with high acquisition efficiency. *Magn Reson Med*.79(1): 339-350, 01/2018. PM28426162
9. Correia T, Ginami G, **Cruz G**, Neji R, Rashid I, Botnar RM, Prieto C: Optimized respiratory-resolved motion-compensated 3D Cartesian coronary MR angiography. *Magn Reson Med*.80(6): 2618-2629, 12/2018. PM29682783
10. Bustin A, Ginami G, **Cruz G**, Correia T, Ismail TF, Rashid I, Neji R, Botnar RM, Prieto C: Five-minute whole-heart coronary MRA with sub-millimeter isotropic resolution, 100% respiratory scan efficiency, and 3D-PROST reconstruction. *Magn Reson Med*.81(1): 102-115, 01/2019. PM30058252
11. **Cruz G**, Jaubert O, Schneider T, Botnar RM, Prieto C: Rigid motion-corrected magnetic resonance fingerprinting. *Magn Reson Med*.81(2): 947-961, 02/2019. PM30229558
12. Roccia E, Vidya Shankar R, Neji R, **Cruz G**, Munoz C, Botnar R, Goh V, Prieto C, Dregely I: Accelerated 3D T2 mapping with dictionary-based matching for prostate imaging. *Magn Reson Med*.81(3): 1795-1805, 03/2019. PM30368900
13. Bustin A, **Lima da Cruz G**, Jaubert O, Lopez K, Botnar RM, Prieto C: High-dimensionality undersampled patch-based reconstruction (HD-PROST) for accelerated multi-contrast MRI. *Magn Reson Med*.81(6): 3705-3719, 06/2019. PM30834594
14. **Lima da Cruz G**, Bustin A, Jaubert O, Schneider T, Botnar RM, Prieto C: Sparsity and locally low rank regularization for MR fingerprinting. *Magn Reson Med*.81(6): 3530-3543, 06/2019. PM30720209
15. Milotta G, Ginami G, **Cruz G**, Neji R, Prieto C, Botnar RM: Simultaneous 3D whole-heart bright-blood and black blood imaging for cardiovascular anatomy and wall assessment with interleaved T2 prep-IR. *Magn Reson Med*.82(1): 312-325, 07/2019. PM30896049
16. Oksuz I, Ruijsink B, Puyol-Antón E, Clough JR, **Cruz G**, Bustin A, Prieto C, Botnar R, Rueckert D, Schnabel JA, King AP: Automatic CNN-based detection of cardiac MR motion artefacts using k-space data augmentation and curriculum learning. *Med Image Anal*.55: 136-147, 07/2019. PM31055126
17. **Cruz G**, Jaubert O, Botnar RM, Prieto C: Cardiac Magnetic Resonance Fingerprinting: Technical Developments and Initial Clinical Validation. *Curr Cardiol Rep*.21(9): 91, 07/2019. PM31352620
18. Munoz C, **Cruz G**, Neji R, Botnar RM, Prieto C: Motion corrected water/fat whole-heart coronary MR angiography with 100% respiratory efficiency. *Magn Reson Med*.82(2): 732-742, 08/2019. PM30927310
19. Vidya Shankar R, Roccia E, **Cruz G**, Neji R, Botnar R, Prezzi D, Goh V, Prieto C, Dregely I: Accelerated 3D T2 w-imaging of the prostate with 1-millimeter isotropic resolution in less than 3 minutes. *Magn Reson Med*.82(2): 721-731, 08/2019. PM31006906
20. Qi H, Jaubert O, Bustin A, **Cruz G**, Chen H, Botnar R, Prieto C: Free-running 3D whole heart myocardial T1 mapping with isotropic spatial resolution. *Magn Reson Med*.82(4): 1331-1342, 10/2019. PM31099442

21. Qi H, Bustin A, **Cruz G**, Jaubert O, Chen H, Botnar RM, Prieto C: Free-running simultaneous myocardial T1/T2 mapping and cine imaging with 3D whole-heart coverage and isotropic spatial resolution. *Magn Reson Imaging*.63: 159-169, 11/2019. PM31425810
22. Nordio G, Schneider T, **Cruz G**, Correia T, Bustin A, Prieto C, Botnar RM, Henningsson M: Whole-heart T1 mapping using a 2D fat image navigator for respiratory motion compensation. *Magn Reson Med*.83(1): 178-187, 01/2020. PM31400054
23. Qi H, Bustin A, Kuestner T, Hajhosseiny R, **Cruz G**, Kunze K, Neji R, Botnar RM, Prieto C: Respiratory motion-compensated high-resolution 3D whole-heart T1p mapping. *J Cardiovasc Magn Reson*.22(1): 12, 02/2020. PM32014001
24. Clough JR, Balfour DR, **Cruz G**, Marsden PK, Prieto C, Reader AJ, King AP: Weighted Manifold Alignment using Wave Kernel Signatures for Aligning Medical Image Datasets. *IEEE Trans Pattern Anal Mach Intell*.42(4): 988-997, 04/2020. PM30629492
25. Bustin A, Rashid I, **Cruz G**, Hajhosseiny R, Correia T, Neji R, Rajani R, Ismail TF, Botnar RM, Prieto C: 3D whole-heart isotropic sub-millimeter resolution coronary magnetic resonance angiography with non-rigid motion-compensated PROST. *Journal of Cardiovascular Magnetic Resonance*.22(1): 24, 04/2020. PM32299445
26. Jaubert O, **Cruz G**, Bustin A, Schneider T, Koken P, Doneva M, Rueckert D, Botnar RM, Prieto C: Free-running cardiac magnetic resonance fingerprinting: Joint T1/T2 map and Cine imaging. *Magn Reson Imaging*.68: 173-182, 05/2020. PM32061964
27. Jaubert O, **Cruz G**, Bustin A, Schneider T, Lavin B, Koken P, Hajhosseiny R, Doneva M, Rueckert D, Botnar RM, Prieto C: Water-fat Dixon cardiac magnetic resonance fingerprinting. *Magn Reson Med*.83(6): 2107-2123, 06/2020. PM31736146
28. **Cruz G**, Jaubert O, Qi H, Bustin A, Milotta G, Schneider T, Koken P, Doneva M, Botnar RM, Prieto C: 3D free-breathing cardiac magnetic resonance fingerprinting. *NMR Biomed*.33(10): e4370, 10/2020. PM32696590
29. Jaubert O, Arrieta C, **Cruz G**, Bustin A, Schneider T, Georgiopoulos G, Masci P-G, Sing-Long C, Botnar RM, Prieto C: Multi-parametric liver tissue characterization using MR fingerprinting: Simultaneous T1, T2, T2*, and fat fraction mapping. *Magn Reson Med*.84(5): 2625-2635, 11/2020. PM32406125
30. Oksuz I, Clough JR, Ruijsink B, Anton EP, Bustin A, **Cruz G**, Prieto C, King AP, Schnabel JA: Deep Learning-Based Detection and Correction of Cardiac MR Motion Artefacts During Reconstruction for High-Quality Segmentation. *IEEE Trans Med Imaging*.39(12): 4001-4010, 12/2020. PM32746141
31. Hajhosseiny R, Bustin A, Munoz C, Rashid I, **Cruz G**, Manning WJ, Prieto C, Botnar RM: Coronary Magnetic Resonance Angiography: Technical Innovations Leading Us to the Promised Land?. *JACC Cardiovasc Imaging*.13(12): 2653-2672, 12/2020. PM32199836
32. Qi H, Fuin N, **Cruz G**, Pan J, Kuestner T, Bustin A, Botnar RM, Prieto C: Non-Rigid Respiratory Motion Estimation of Whole-Heart Coronary MR Images Using Unsupervised Deep Learning. *IEEE Trans Med Imaging*.40(1): 444-454, 01/2021. PM33021937
33. Hajhosseiny R, Munoz C, **Cruz G**, Khamis R, Kim WY, Prieto C, Botnar RM: Coronary Magnetic Resonance Angiography in Chronic Coronary Syndromes. *Front Cardiovasc Med*.8: 682924, 01/2021. PM34485397
34. Jaubert O, **Cruz G**, Bustin A, Hajhosseiny R, Nazir S, Schneider T, Koken P, Doneva M, Rueckert D, Masci P-G, Botnar RM, Prieto C: T1, T2, and Fat Fraction Cardiac MR Fingerprinting: Preliminary Clinical Evaluation. *J Magn Reson Imaging*.53(4): 1253-1265, 04/2021. PM33124081
35. Qi H, **Cruz G**, Botnar R, Prieto C: Synergistic multi-contrast cardiac magnetic resonance image reconstruction. *Philos Trans A Math Phys Eng Sci*.379(2200): 20200197, 06/2021. PM33966456
36. Qi H, Hajhosseiny R, **Cruz G**, Kuestner T, Kunze K, Neji R, Botnar R, Prieto C: End-to-end deep learning nonrigid motion-corrected reconstruction for highly accelerated free-breathing coronary MRA. *Magn Reson Med*.86(4): 1983-1996, 10/2021. PM34096095
37. Kustner T, Pan J, Qi H, **Cruz G**, Gilliam C, Blu T, Yang B, Gatidis S, Botnar R, Prieto C: LAPNet: Non-Rigid Registration Derived in k-Space for Magnetic Resonance Imaging. *IEEE Trans Med Imaging*.40(12): 3686-3697, 12/2021. PM34242163

38. Hajhosseiny R, Rashid I, Bustin A, Munoz C, **Cruz G**, Nazir MS, Grigoryan K, Ismail TF, Preston R, Neji R, Kunze K, Razavi R, Chiribiri A, Masci PG, Rajani R, Prieto C, Botnar RM: Clinical comparison of sub-mm high-resolution non-contrast coronary CMR angiography against coronary CT angiography in patients with low-intermediate risk of coronary artery disease: a single center trial. *Journal of Cardiovascular Magnetic Resonance*.23(1): 57, 12/2021. PM33993890
39. Coronado R, **Cruz G**, Castillo-Passi C, Tejos C, Uribe S, Prieto C, Irrazaval P: A Spatial Off-Resonance Correction in Spirals for Magnetic Resonance Fingerprinting. *IEEE Trans Med Imaging*.40(12): 3832-3842, 12/2021. PM34310296
40. West DJ, **Cruz G**, Teixeira RP A G, Schneider T, Tournier J-D, Hajnal JV, Prieto C, Malik SJ: An MR fingerprinting approach for quantitative inhomogeneous magnetization transfer imaging. *Magn Reson Med*.87(1): 220-235, 01/2022. PM34418151
41. Munoz C, Qi H, **Cruz G**, Küstner T, Botnar RM, Prieto C: Self-supervised learning-based diffeomorphic non-rigid motion estimation for fast motion-compensated coronary MR angiography. *Magn Reson Imaging*.85: 10-18, 01/2022. PM34655727
42. **Cruz G**, Qi H, Jaubert O, Kuestner T, Schneider T, Botnar RM, Prieto C: Generalized low-rank nonrigid motion-corrected reconstruction for MR fingerprinting. *Magn Reson Med*.87(2): 746-763, 02/2022. PM34601737
43. Kustner T, Pan J, Gilliam C, Qi H, **Cruz G**, Hammernik K, Blu T, Rueckert D, Botnar R, Prieto C, Gatidis S: Self-Supervised Motion-Corrected Image Reconstruction Network for 4D Magnetic Resonance Imaging of the Body Trunk. *APSIPA Transactions on Signal and Information Processing*.11(1)02/2022
44. Schneider A, **Cruz G**, Munoz C, Hajhosseiny R, Kuestner T, Kunze KP, Neji R, Botnar RM, Prieto C: Whole-heart non-rigid motion corrected coronary MRA with autofocus virtual 3D iNAV. *Magn Reson Imaging*.87: 169-176, 04/2022. PM34999163
45. Velasco C, **Cruz G**, Jaubert O, Lavin B, Botnar RM, Prieto C: Simultaneous comprehensive liver T1 , T2 , T2* , T1p , and fat fraction characterization with MR fingerprinting. *Magn Reson Med*.87(4): 1980-1991, 04/2022. PM34792212
46. Velasco C, **Cruz G**, Lavin B, Hua A, Fotaki A, Botnar RM, Prieto C: Simultaneous T1 , T2 , and T1p cardiac magnetic resonance fingerprinting for contrast agent-free myocardial tissue characterization. *Magn Reson Med*.87(4): 1992-2002, 04/2022. PM34799854
47. Soyak R, Navruz E, Ersoy EO, **Cruz G**, Prieto C, King AP, Unay D, Oksuz I: Channel Attention Networks for Robust MR Fingerprint Matching. *IEEE Trans Biomed Eng*.69(4): 1398-1405, 04/2022. PM34591755
48. **Lima da Cruz GJ**, Velasco C, Lavin B, Jaubert O, Botnar RM, Prieto C: Myocardial T1, T2, T2*, and fat fraction quantification via low-rank motion-corrected cardiac MR fingerprinting. *Magn Reson Med*.87(6): 2757-2774, 06/2022. PM35081260
49. Fujita S, Sano K, **Cruz G**, Fukumura Y, Kawasaki H, Fukunaga I, Morita Y, Yoneyama M, Kamagata K, Abe O, Ikejima K, Botnar RM, Prieto C, Aoki S: MR Fingerprinting for Liver Tissue Characterization: A Histopathologic Correlation Study. *Radiology*.306(1): 150-159, 01/2023. PM36040337
50. Phair A, **Cruz G**, Qi H, Botnar RM, Prieto C: Free-running 3D whole-heart T1 and T2 mapping and cine MRI using low-rank reconstruction with non-rigid cardiac motion correction. *Magn Reson Med*.89(1): 217-232, 01/2023. PM36198014
51. Lo Presti S, Eck BL, Reyaldien R, Nguyen C, Tang WH W, Flamm SD, Seiberlich N, **Lima da Cruz G**, Prieto C, Kwon DH: Fingerprinting MINOCA: Unraveling Clues With Quantitative CMR. *JACC: Case Reports*.7: 101722, 02/2023. PM36776793
52. Eck BL, Yim M, Hamilton JI, da Cruz GJ L, Li X, Flamm SD, Tang WH W, Prieto C, Seiberlich N, Kwon DH: Cardiac Magnetic Resonance Fingerprinting: Potential Clinical Applications. *Curr Cardiol Rep*.25(3): 119-131, 03/2023. PM36805913
53. **Cruz G**, Hammernik K, Kuestner T, Velasco C, Hua A, Ismail TF, Rueckert D, Botnar RM, Prieto C: Single-heartbeat cardiac cine imaging via jointly regularized nonrigid motion-corrected reconstruction. *NMR Biomed*.: e4942, 03/2023. PM36999225

54. **Cruz G**, Hua A, Munoz C, Ismail TF, Chiribiri A, Botnar RM, Prieto C: Low-rank motion correction for accelerated free-breathing first-pass myocardial perfusion imaging. *Magn Reson Med*.90(1): 64-78, 07/2023. PM36861454
55. Machado I, Puyol-Anton E, Hammernik K, **Cruz G**, Ugurlu D, Olakorede I, Oksuz I, Ruijsink B, Castelo-Branco M, Young A, Prieto C, Schnabel J, King A: A Deep Learning-based Integrated Framework for Quality-aware Undersampled Cine Cardiac MRI Reconstruction and Analysis. *IEEE Trans Biomed Eng*.PP10/2023. PM37782583
56. Fujita S, Sano K, **Cruz G**, Velasco C, Kawasaki H, Fukumura Y, Yoneyama M, Suzuki A, Yamamoto K, Morita Y, Arai T, Fukunaga I, Uchida W, Kamagata K, Abe O, Kuwatsuru R, Saiura A, Ikejima K, Botnar R, Prieto C, Aoki S: MR Fingerprinting for Contrast Agent-free and Quantitative Characterization of Focal Liver Lesions. *Radiol Imaging Cancer*.5(6): e230036, 11/2023. PM37999629

Review

1. Rashid I, **Lima da Cruz G**, Seiberlich N, Hamilton J: Cardiac MR Fingerprinting: Overview, Technical Developments, and Applications. *Journal of Magnetic Resonance Imaging*.PM38153855 ,(In Press)

Chapters

1. **Lima da Cruz G**, Doneva M, Akcakaya M, Prieto C: MR as an Inverse Problem. In **Lima da Cruz G**, Doneva M, Akcakaya M, Prieto C Eds. *MRI Reconstruction: Theory, Methods and Applications*,Academic Press
2. **Lima da Cruz G**, Kuestner T, Botnar R, Prieto C: Cardiac Imaging. In **Lima da Cruz G**, Kuestner T, Botnar R, Prieto C Eds. *Motion Correction in MR: Correction of Position, Motion and Dynamic Changes*,Elsevier Science
3. Prieto C, Botnar R, Roujol S, **Lima da Cruz G**: Specialized Mapping Methods in the Heart. In Seiberlich N, Gulani V, Campbell A, Sourbron S, Doneva M, Calamante F, Hu H Eds. *Quantitative Magnetic Resonance Imaging*,1, Elsevier, (2020)
4. Munoz C, **Lima da Cruz G**, Prieto C, Botnar R: Innovations in Cardiovascular MR and PET-MR Imaging. In Nekolla S, Rischpler C Ed. *Hybrid Cardiac Imaging*,Springer Nature, (2021)
5. Hammernik K, Rueckert D, **Cruz G**, Pan J, Li HB, Huang W: Neural Implicit k-Space for Binning-Free Non-Cartesian Cardiac MR Imaging. 13939 LNCS, (2023), 548-560

Submitted Peer-Reviewed

Journal Article

1. Hamilton J, Rashid I, Galizia M, **Lima da Cruz G**, Walker J, Rajagopalan S, Seiberlich N: High-Resolution MR Fingerprinting for T1-T2 Mapping of the Left and Right Ventricles Using a Deep Image Prior Reconstruction. *Magnetic Resonance in Medicine*. ,(Submitted)

Abstract/Posters

1. **Lima da Cruz G**: MR Lecture, London, England, 2017
2. Oksuz I, Clough J, Bustin A, **Cruz G**, Prieto C, Botnar R, Rueckert D, Schnabel JA, King AP: Cardiac mr motion artefact correction from k-space using deep learning-based reconstruction, *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*.11074 LNCS, : 21-29, 2018
3. Oksuz I, Ruijsink B, Puyol-Antón E, Bustin A, **Cruz G**, Prieto C, Rueckert D, Schnabel JA, King AP: Deep learning using K-space based data augmentation for automated cardiac MR motion artefact detection, *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*.11070 LNCS, : 250-258, 2018
4. **Lima da Cruz G**: MR Physics and Reconstruction, Oral Presentation, PSMR Training School, Elba, Italy, 2018, 2018

5. Oksuz I, **Cruz G**, Clough J, Bustin A, Fuin N, Botnar RM, Prieto C, King AP, Schnabel JA: Magnetic resonance fingerprinting using recurrent neural networks, *Proceedings - International Symposium on Biomedical Imaging*.2019-April, : 1537-1540, 2019
6. Oksuz I, Clough J, Ruijsink B, Puyol-Antón E, Bustin A, **Cruz G**, Prieto C, Rueckert D, King AP, Schnabel JA: Detection and correction of cardiac MRI motion artefacts during reconstruction from k-space, *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*.11767 LNCS, : 695-703, 2019
7. **Lima da Cruz G**: MR Physics and Reconstruction, Oral Presentation, PSMT Training School, Munich, Germany, 2019, 2019
8. Oksuz I, Clough J, Bai W, Ruijsink B, Puyol-Antón E, **Cruz G**, Prieto C, King AP, Schnabel JA: High-quality segmentation of low quality cardiac MR images using k-space artefact correction, *Proceedings of Machine Learning Research*.102, : 380-389, 2019
9. Kustner T, Pan J, Gilliam C, Qi H, **Cruz G**, Hammernik K, Yang B, Blu T, Rueckert D, Botnar R, Prieto C, Gatidis S: Deep-learning based motion-corrected image reconstruction in 4D magnetic resonance imaging of the body trunk, *2020 Asia-Pacific Signal and Information Processing Association Annual Summit and Conference, APSIPA ASC 2020 - Proceedings*.: 976-985, 2020
10. **Lima da Cruz G**: MR Reconstruction, Oral Presentation, International Federation for Information Processing (IFIP) Conference on System Modelling and Optimization, Santiago, Chile, 2021
11. **Lima da Cruz G**: MR Acquisition, Oral Presentation, European Molecular Imaging Meeting (EMIM) 2021, Gottingen, Germany, 2021
12. **Lima da Cruz G**: MR Cardiac Reconstruction, Oral Presentation, 16th British Society Of Cardiovascular Magnetic Resonance (BSCMR) Hybrid Annual Meeting, London, England, 2021
13. Machado I, Puyol-Antón E, Hammernik K, **Cruz G**, Ugurlu D, Ruijsink B, Castelo-Branco M, Young A, Prieto C, Schnabel JA, King AP: Quality-Aware Cine Cardiac MRI Reconstruction and Analysis from Undersampled K-Space Data, *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics)*.13131 LNCS, : 12-20, 2022
14. **Lima da Cruz G**: Motion Correction Tutorial, Oral Presentation, International Society for Magnetic Resonance in Medicine (ISMRM) Workshop in Motion Correction, Oxford, England, 2022
15. Hamilton J, **Lima da Cruz G**, Rashid I, Rajagopalan S, Seiberlich N: Cardiac Phase-Resolved T1, T2, and M0 Mapping and Bright/Dark Blood Cine Imaging using MR Fingerprinting with Self-Supervised Deep Learning, Oral Presentation, Society for Cardiovascular Magnetic Resonance (SCMR), San Diego, CA, 2023
16. Hamilton J, **Lima da Cruz G**, Rashid I, Rajagopalan S, Seiberlich N: MR Fingerprinting with a Deep Image Prior Reconstruction for Combined T1, T2, and M0 Mapping and Multi-Contrast Cine Imaging, Oral Presentation, International Society for Magnetic Resonance in Medicine (ISMRM) Annual Meeting, Toronto, Canada, 2023
17. **Lima da Cruz G**, Liu Y, Cummings E, Hamilton J, Gulani V, Seiberlich N: Improved T1, T2, and PDFFF Mapping with Rosette MRF Using Virtual-Coil + Low-Rank + Patch-Based Regularization, Conference Proceeding, International Society for Magnetic Resonance in Medicine (ISMRM) Annual Meeting, Toronto, Canada, 2023
18. **Lima da Cruz G**, Hamilton J, Cummings E, Liu Y, Gulani V, Seiberlich N: Virtual Coil Concept with Multi-Scale Low-Rank for Real-Time Cardiac MRI at 0.55T, Conference Proceeding, International Society for Magnetic Resonance in Medicine (ISMRM) Annual Meeting, Toronto, Canada, 2023
19. Hamilton J, **Lima da Cruz G**, Rashid I, Rajagopalan S, Seiberlich N: Deep Image Prior Reconstruction for MR Fingerprinting T1, T2, & M0 Mapping & Multi-Contrast Cine Imaging, Poster, ISMRM Workshop on Data Sampling & Image Reconstruction, Sedona, AZ, 2023
20. **Lima da Cruz G**, Cummings E, Liu Y, Hamilton J, Gulani V, Seiberlich N: Embedding a k-means denoiser into the forward model for noisy, undersampled reconstructions, Poster, ISMRM Workshop on Data Sampling & Image Reconstruction, Sedona, AZ, 2023
21. **Lima da Cruz G**, Hamilton J, Liu Y, Cummings E, Gulani V, Seiberlich N: Improved T1/T2/PDFFF rosette cardiac MRF using virtual-coil + low-rank + patch-based regularization, Oral Presentation, ISMRM Workshop on Data Sampling & Image Reconstruction, Sedona, AZ, 2023

22. **Lima da Cruz G:** MR Image Artifacts (upcoming), Oral Presentation, 2023 International Society for Magnetic Resonance in Medicine (ISMRM) & The International Society for MR Radiographers & Technologists (ISMRT) Annual Meeting & Exhibition, Toronto, Canada, 2023