

Refereed journal articles

- (1) E. Airta, T. Hytönen, K. Li, H. Martikainen, T. Oikari, Off-diagonal estimates for bi-commutators, **International Mathematics Research Notices**, to appear, [arXiv:2005.03548](https://arxiv.org/abs/2005.03548), 2020.
- (2) F. Di Plinio, K. Li, H. Martikainen, E. Vuorinen, Multilinear singular integrals on non-commutative L^p spaces, **Mathematische Annalen** **378** (2020) 1371–1414, <https://doi.org/10.1007/s00208-020-02068-4>.
- (3) F. Di Plinio, K. Li, H. Martikainen, E. Vuorinen, Banach-valued multilinear singular integrals with modulation invariance, **International Mathematics Research Notices** (2020), <https://doi.org/10.1093/imrn/rnaa234>.
- (4) F. Di Plinio, K. Li, H. Martikainen, E. Vuorinen, Multilinear operator-valued Calderón–Zygmund theory, **Journal of Functional Analysis** **279** (8) (2020) 108666, <https://doi.org/10.1016/j.jfa.2020.108666>.
- (5) E. Airta, K. Li, H. Martikainen, E. Vuorinen, Some new weighted estimates on product spaces, **Indiana University Mathematics Journal**, to appear, [arXiv:1910.12546](https://arxiv.org/abs/1910.12546), 2019.
- (6) K. Li, J. M. Martell, H. Martikainen, S. Ombrosi, E. Vuorinen, End-point estimates, extrapolation for multilinear Muckenhoupt classes, and applications, **Transactions of the American Mathematical Society** **374** (1) (2021) 97–135, <https://doi.org/10.1090/tran/8172>.
- (7) K. Li, H. Martikainen, E. Vuorinen, Bilinear Calderón–Zygmund theory on product spaces, **Journal de Mathématiques Pures et Appliquées** **138** (2020) 356–412, <https://doi.org/10.1016/j.matpur.2019.10.007>.
- (8) T. Hytönen, H. Martikainen, E. Vuorinen, Multi-parameter estimates via operator-valued shifts, **Proceedings of the London Mathematical Society** **119** (6) (2019) 1560–1597, <https://doi.org/10.1112/plms.12279>.
- (9) K. Li, H. Martikainen, E. Vuorinen, Bloom type upper bounds in the product BMO setting, **The Journal of Geometric Analysis** **30** (2020) 3181–3203, <https://doi.org/10.1007/s12220-019-00194-3>.
- (10) K. Li, H. Martikainen, E. Vuorinen, Bloom type inequality for bi-parameter singular integrals: efficient proof and iterated commutators, **International Mathematics Research Notices** **2021** (11) (2021) 8153–8187, <https://doi.org/10.1093/imrn/rnz072>.
- (11) H. Martikainen, M. Mourougolou, E. Vuorinen, A new approach to non-homogeneous local Tb theorems, **Journal d’Analyse Mathématique** (2021), <https://doi.org/10.1007/s11854-021-0147-6>.
- (12) H. Martikainen, E. Vuorinen, Dyadic–probabilistic methods in bilinear analysis, **Memoirs of the American Mathematical Society**, to appear, [arXiv:1609.01706](https://arxiv.org/abs/1609.01706), 2018.
- (13) K. Li, H. Martikainen, Y. Ou, E. Vuorinen, Bilinear representation theorem, **Transactions of the American Mathematical Society** **371** (6) (2019) 4193–4214, <https://doi.org/10.1090/tran/7505>.
- (14) H. Martikainen, M. Mourougolou, X. Tolsa, Improved Cotlar’s inequality in the context of local Tb theorems, **Journal of Functional Analysis** **274** (2018) 1255–1275, <https://doi.org/10.1016/j.jfa.2017.12.013>.
- (15) H. Martikainen, T. Orponen, Boundedness of the density normalised Jones’ square function does not imply 1-rectifiability, **Journal de Mathématiques Pures et Appliquées** **110** (2018) 71–92, <https://doi.org/10.1016/j.matpur.2017.07.009>.
- (16) H. Martikainen, M. Mourougolou, E. Vuorinen, Non-homogeneous square functions on general sets: suppression and big pieces methods, **The Journal of Geometric Analysis** **27** (4) (2017) 3176–3227, <http://dx.doi.org/10.1007/s12220-017-9801-8>.

- (17) H. Martikainen, M. Mourgoglou, Note about square function estimates and uniformly rectifiable measures, **Proceedings of the American Mathematical Society** **144** (8) (2016) 3455–3463, <http://dx.doi.org/10.1090/proc/13128>.
- (18) H. Martikainen, T. Orponen, Characterising the big pieces of Lipschitz graphs property using projections, **Journal of the European Mathematical Society** **20** (5) (2018) 1055–1073, <https://doi.org/10.4171/JEMS/782>.
- (19) H. Martikainen, T. Orponen, Some obstacles in characterising the boundedness of bi-parameter singular integrals, **Mathematische Zeitschrift** **282** (2016) 535–545, <http://dx.doi.org/10.1007/s00209-015-1552-2>.
- (20) H. Martikainen, M. Mourgoglou, Boundedness of non-homogeneous square functions and L^q type testing conditions with $q \in (1, 2)$, **Mathematical Research Letters** **22** (5) (2015) 1417–1457, <http://dx.doi.org/10.4310/MRL.2015.v22.n5.a8>.
- (21) M. Lacey, H. Martikainen, Local Tb theorem with L^2 testing conditions and general measures: Calderón–Zygmund operators, **Annales scientifiques de l’École normale supérieure** **49** (1) (2016) 57–86, <https://doi.org/10.24033/asens.2276>.
- (22) M. Lacey, H. Martikainen, Local Tb theorem with L^2 testing conditions and general measures: Square functions, **Journal d’Analyse Mathématique** **133** (1) (2017) 71–89, <http://dx.doi.org/10.1007/s11854-017-0028-1>.
- (23) H. Martikainen, M. Mourgoglou, T. Orponen, Square functions with general measures II, **Indiana University Mathematics Journal** **63** (5) (2014) 1249–1279, <http://dx.doi.org/10.1512/iumj.2014.63.5379>.
- (24) H. Martikainen, Boundedness of a class of bi-parameter square functions in the upper half-space, **Journal of Functional Analysis** **267** (10) (2014) 3580–3597, <http://dx.doi.org/10.1016/j.jfa.2014.09.006>.
- (25) H. Martikainen, M. Mourgoglou, Square functions with general measures, **Proceedings of the American Mathematical Society** **142** (11) (2014) 3923–3931, <http://dx.doi.org/10.1090/S0002-9939-2014-12145-9>.
- (26) T. Hytönen, H. Martikainen, Non-homogeneous $T1$ theorem for bi-parameter singular integrals, **Advances in Mathematics** **261** (2014) 220–273, <http://dx.doi.org/10.1016/j.aim.2014.02.011>.
- (27) H. Martikainen, Representation of bi-parameter singular integrals by dyadic operators, **Advances in Mathematics** **229** (3) (2012) 1734–1761, <http://dx.doi.org/10.1016/j.aim.2011.12.019>.
- (28) T. Hytönen, M. Lacey, H. Martikainen, T. Orponen, M. C. Reguera, E. Sawyer, I. Uriarte–Tuero, Weak and strong type estimates for maximal truncations of Calderón–Zygmund operators on A_p weighted spaces, **Journal d’Analyse Mathématique** **118** (1) (2012) 177–220, <http://dx.doi.org/10.1007/s11854-012-0033-3>.
- (29) T. Hytönen, H. Martikainen, On general local Tb theorems, **Transactions of the American Mathematical Society** **364** (9) (2012) 4819–4846, <http://dx.doi.org/10.1090/S0002-9947-2012-05599-1>.
- (30) H. Martikainen, Vector-valued non-homogeneous Tb theorem on metric measure spaces, **Revista Matemática Iberoamericana** **28** (4) (2012) 961–998, <http://dx.doi.org/10.4171/RMI/699>.
- (31) T. Hytönen, H. Martikainen, Non-homogeneous Tb theorem and random dyadic cubes on metric measure spaces, **The Journal of Geometric Analysis** **22** (4) (2012) 1071–1107, <http://dx.doi.org/10.1007/s12220-011-9230-z>.

ArXiv preprints

- (32) K. Li, H. Martikainen, E. Vuorinen, Genuinely multilinear weighted estimates for singular integrals in product spaces, preprint, [arXiv:2011.04459](https://arxiv.org/abs/2011.04459), 2020.
- (33) E. Airta, H. Martikainen, E. Vuorinen, Modern singular integral theory with mild kernel regularity, preprint, [arXiv:2006.05807](https://arxiv.org/abs/2006.05807), 2020.

PhD thesis

- (34) H. Martikainen, Global, local and vector-valued Tb theorems on non-homogeneous metric spaces, University of Helsinki, Faculty of Science, Department of Mathematics and Statistics (2011).