

# Murray Marshall's publications on Positive Polynomials and Moment Problems

1. M. Ghasemi, M. Infusino, S. Kuhlmann, M. Marshall, *A continuous moment problem for locally convex spaces*, in preparation.
2. M. Ghasemi, S. Kuhlmann, M. Marshall, *Moment problem in infinitely many variables*, arXiv:1409.5777, to appear.
3. M. Marshall, *Application of localization to the multivariate moment problem II*, arXiv:1410.4609, to appear.
4. M. Ghasemi, M. Marshall, *Lower bounds for a polynomial on a basic closed semialgebraic set using geometric programming*, arXiv:1311.3726
5. M. Ghasemi, S. Kuhlmann, M. Marshall, *Application of Jacobi's representation theorem to locally multiplicatively convex topological  $R$ -algebras*, *J. Functional Analysis*, 266 (2014), no. 2, 1041–1049.
6. M. Ghasemi, J.B. Lasserre, M. Marshall, *Lower bounds on the global minimum of a polynomial*, *Computational Optimization and Applications*, 57 (2014) 387–402.
7. M. Marshall, *Application of localization to the multivariate moment problem*, *Math. Scandinavica*, 115 no. 2 (2014) 269–286.
8. M. Ghasemi, M. Marshall, Sven Wagner, *Closure of the cone of sums of  $2d$ -powers in certain weighted  $\ell_1$ -seminorm topologies*, *Canad. Math. Bull.*, 57, no 2, (2014) 289-302.
9. M. Ghasemi, M. Marshall, *Lower bounds for polynomials using geometric programming*, *SIAM Journal on Optimization*, 22 (2012) 460–473.
10. M. Marshall, T. Netzer, *Positivstellensätze for real function algebras*, *Math. Zeitschrift*, 270 (2012) 889–901.
11. J. Cimprič, M. Marshall, T. Netzer, *Closures of quadratic modules*, *Israel J. Math.*, 189 (2011) 445–474.
12. J. Cimprič, M. Marshall, T. Netzer, *On the real multidimensional rational  $K$ -moment problem*, *Transactions AMS*, 363 (2011) 5773–5788.
13. M. Ghasemi, M. Marshall, *Lower bounds for a polynomial in terms of its coefficients*, *Archiv der Mathematik*, 95 (2010) 343–353.
14. M. Marshall, *Polynomials non-negative on a strip*, *Proceedings AMS*, 138 (2010) 1559–1567.
15. J. Cimprič, S. Kuhlmann, M. Marshall, *Positivity in power series rings*, *Advances in Geometry*, 10 (2010) 135–143.
16. M. Marshall, *Representation of non-negative polynomials, degree bounds and applications to optimization*, *Canad. J. Math.*, 61 (2009) 205–221.
17. M. Marshall, *Positive polynomials and sums of squares*, *AMS Math. Surveys and Monographs* 146 (2008) 187+xii pages.
18. M. Marshall, *Representation of non-negative polynomials with finitely many zeros*, *Annales de la Faculte des Sciences Toulouse* 15 (2006)
19. M. Marshall, *Error estimates in the optimization of degree two polynomials on a discrete hypercube*, *SIAM Journal on Optimization*, 16 (2005)
20. S. Kuhlmann, M. Marshall, N. Schwartz, *Positivity, sums of squares and the multi-dimensional moment problem II*, *Advances in Geometry*, 5(2005)583-606
21. M. Marshall, *Approximating Positive Polynomials Using Sums Of Squares*, *Can. math. bulletin*, 46 (2003) 400-418
22. M. Marshall, *Optimization of Polynomial Functions*, *Can. math. bulletin*, 46 (2003) 575-587
23. S. Kuhlmann, M. Marshall, *Positivity, sums of squares and the multi-dimensional moment problem*, *TAMS* 354 (2002), 4285-4301
24. M. Marshall, *A General Representation Theorem For Partially Ordered Commutative Rings*, *Math. Zeitschrift* 242 (2002), 217-225
25. M. Marshall, *Extending The Archimedean Positivstellensatz To The Non-Compact Case*, *Can. math. bulletin*, 44 (2001) 223-230
26. M. Marshall, *A Real Holomorphy Ring Without The Schmüdgen Property*, *Can. math. bulletin*, 42 (1999) 354-35