

Publications by Anders Lindquist

(some recent papers can be found at <http://www.math.kth.se/~alq/>)

Articles

1. *The moment problem for rational measures: convexity in the spirit of Krein* (with C. I. Byrnes), in *Modern Analysis and Application: To the centenary of Mark Krein, Vol. I: Operator Theory and Related Topics*, Birkhuser, 2009.
2. *The inverse problem of analytic interpolation with degree constraint and weight selection for control synthesis* (with J. Karlsson and T. T. Georgiou), *IEEE Trans. Automatic Control*, to be published.
3. *A global injective function theorem* (with C. I. Byrnes), submitted for publication.
4. *Important moments in systems and control* (with C. I. Byrnes), *SIAM J. Control and Optimization* **47**(5) (2008), 2458–2469.
5. *Weight selection for gap robustness with degree-constrained controllers* (with J. Karlsson and T.T. Georgeou), *Proc. 47th IEEE Conf. Decision and Control*, 2008, pp. 4127–4134.
6. *Stability-preserving rational approximation subject to interpolation constraints* (with J. Karlsson), *IEEE Trans. Automatic Control* **53**(7) (2008), 1724–1730.
7. *A convex optimization approach to ARMA modeling* (with T. T. Georgiou), *IEEE Trans. Automatic Control* **53** (2008), 1108–1119.
8. *On degree-constrained analytic interpolation with interpolation points close to the boundary* (with J. Karlsson), *IEEE Trans. Automatic Control* 54(3), to be published.
9. *A note on the Jacobian conjecture* (with C. I. Byrnes), *Proceedings of the American Mathematical Society* **136** (2008), 3007–3011.
10. *Prediction-error approximation by convex optimization, in Modeling, Estimation and Control: Festschrift in honor of Giorgio Picci on the occasion of his sixty-fifth Birthday*, A. Chiuso, A. Ferrante and S. Pinzoni (eds), Springer-Verlag, 2007, 265–275.
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12. *Stable rational approximation in the context of interpolation and convex optimization* (with J. Karlsson), Proc. 46th IEEE Conf. Decision and Control, 2007, pp. 4353–4360.
13. *Interior point solutions of variational problems and global inverse function theorems* (with C. I. Byrnes), International Journal of Robust and Nonlinear Control **17** (2007), 463–481: special issue in honor of V.A.Yakubovich on the occasion of his 80th birthday.
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15. *The generalized moment problem with complexity constraint* (with C. I. Byrnes), Integral Equations and Operator Theory **56**(2) (2006), 163–180 (published online March 29, 2006).
16. *Generalized interpolation in H -infinity with a complexity constraint* (with C. I. Byrnes, T. T. Georgiou and A. Megretski), Transactions of the American Mathematical Society **358** (2006), no. 3, pp. 965–987 (electronically published on December 9, 2004).
17. *The inverse problem of analytic interpolation with degree constraint* (with J. Karlsson and T.T. Georgiou), Proc. 45th IEEE Conf. Decision and Control, 2006, pp. 559–564.
18. *A global analysis approach to passivity preserving model reduction* (with G. Fanizza, J. Karlsson and R. Nagamune), Proc. 45th IEEE Conf. Decision and Control, 2006, pp. 3399–3404.
19. *Bi-tangential Nevanlinna-Pick interpolation with a complexity constraint* (with Y. Kuroiowa), Proceedings of the 17th International Symposium on the Mathematical Theory of Networks and Systems, Kyoto, 2006, pp. 2541–2563.
20. *On degree-constrained analytic interpolation with interpolation points close to the boundary* (with J. Karlsson), Proceedings of the 17th International Symposium on the Mathematical Theory of Networks and Systems, Kyoto, 2006, pp. 2564–2569.
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23. *The covariance extension equations revisited* (with C.I. Byrnes and G. Fanizza), Proceedings of the 44th IEEE Conference on Decision and Control, 2005, pp. 7924–7930.
24. *Kullback-Leibler approximation of spectral density functions* (with T. T. Georgiou), IEEE Transactions on Information Theory 49 (Nov. 2003), 2910–2917.
25. *Matrix-valued Nevanlinna-Pick interpolation with complexity constraint: An optimization approach* (with A. Blomqvist and R. Nagamune), IEEE Transactions on Automatic Control 48 (Dec. 2003), 2172–2190.
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28. *Kullback-Leibler approximation of spectral density functions* (with T.T. Georgiou), Proceedings. 42nd IEEE Conference on Decision and Control, 2003, Volume: 4, pp 4237 - 4242.
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35. *Cepstral coefficients, covariance lags and pole-zero models for finite data strings* (with C. I. Byrnes and P. Enqvist), *IEEE Trans. SP-50* (April 2001), 677–693.
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38. *A covariance extension approach to identification of time series* (with J. Mari and A. Dahlén), *Automatica* **36** (2000), 379–398.
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48. *On the partial stochastic realization problem* (with C. I. Byrnes), IEEE Trans. **AC-42** (1997), 1049–1069.
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Books

1. *Linear Stochastic Systems: A Geometric Approach to Modeling, Estimation and Identification* (with G. Picci), in preparation.
2. *New Directions and Applications in Control Theory* (Editor, with W. P. Dayawansa and Y. Zhou), Springer Verlag, 2005.
3. *Computational and Combinatorial Methods in Systems Theory* (Editor, with C.I. Byrnes), North-Holland, 1986.
4. *Theory and Applications of Nonlinear Control Systems* (Editor, with C.I. Byrnes), North-Holland, 1986.
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Book Reviews

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