

Publications of Charles W. Wampler

Books

- [1] Sommese, A. J., and Wampler, C. W., *Numerical Solution of Polynomial Systems Arising in Engineering and Science*, World Scientific, Singapore, 2005.
- [2] Wampler, C. W., *Computer Methods in Manipulator Kinematics, Dynamics, and Control: A Comparative Study*, Ph. D. Thesis, Stanford University, December 1984.

Edited Books

- [1] Bates, D., Besana, G.-M., Di Rocco, S., and Wampler, C., (Eds.), *Interactions of Classical and Numerical Algebraic Geometry*, Contemporary Mathematics 496, Amer. Math. Soc., Providence, R.I., 2009.

Book Chapters

- [1] Sommese, A., Verschelde, J., and Wampler, C., “Introduction to Numerical Algebraic Geometry,” Chapter 8, *Solving Polynomial Equations: Foundations, Algorithms, and Applications*, Algorithms and Computation in Mathematics 14, A.Dickenstein, I.Z.Emiris (Eds.), Springer, 2005, pp. 339–392.
- [2] Wampler, C.W., “Wrist singularities: Theory and practice,” *The Robotics Review 2*, O. Khatib, J. Craig, and T. Lozano-Pérez (Eds.), MIT Press, 1992, pp. 173–189.

Articles

- [1] Bates, D., Hauenstein, J., Sommese, A.J., and Wampler, C.W., “Stepsize control for adaptive multiprecision path tracking,” in *Interactions of Classical and Numerical Algebraic Geometry*, D. Bates, G.-M. Besana, S. Di Rocco, and C. Wampler (Eds.), Contemporary Mathematics, Vol. 496, pp. 21–31, Amer. Math. Soc., 2009.
- [2] Gao, D., and Wampler, C.W., “Head Injury Criterion: Assessing the Danger of Robot Impact,” to appear in IEEE Robotics & Automation Magazine, 2009.
- [3] Bates, D., Sommese, A.J., and Wampler, C.W., “Adaptive multiprecision path tracking,” *SIAM Journal on Numerical Mathematics*, 46:2:722-746, 2008.
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- [5] Bates, D., Hauenstein, J., Sommese, A.J., and Wampler, C.W., “Software for numerical algebraic geometry: a paradigm and progress towards its implementation,” in *Software for Algebraic Geometry*, IMA Volumes in Math. and its Applications, Vol. 148, eds. M. Stillman, N. Takayama, and J. Verschelde, Springer, 2008.
- [6] Sommese, A., Verschelde, J., and Wampler, C., “Solving polynomial systems equation by equation,” in *Algorithms in Algebraic Geometry*, IMA Volumes in Math. and its

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