

Stanford



Walter Murray

Professor (Research) of Management Science and Engineering, Emeritus

Bio

BIO

Professor Murray's research interests include numerical optimization, numerical linear algebra, sparse matrix methods, optimization software and applications of optimization. He has authored two books (*Practical Optimization* and *Optimization and Numerical Linear Algebra*) and over eighty papers. In addition to his University work he has extensive consulting experience with industry, government, and commerce.

ACADEMIC APPOINTMENTS

- Emeritus Faculty, Acad Council, Management Science and Engineering
- Member, Institute for Computational and Mathematical Engineering (ICME)

PROFESSIONAL EDUCATION

- PhD, London University (1969)

Publications

PUBLICATIONS

- **A local relaxation method for the cardinality constrained portfolio optimization problem** *COMPUTATIONAL OPTIMIZATION AND APPLICATIONS*
Murray, W., Shek, H.
2012; 53 (3): 681-709
- **Measurement of the jet fragmentation function and transverse profile in proton-proton collisions at a center-of-mass energy of 7 TeV with the ATLAS detector** *EUROPEAN PHYSICAL JOURNAL C*
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- **Charged-particle multiplicities in pp interactions measured with the ATLAS detector at the LHC** *NEW JOURNAL OF PHYSICS*
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- **Search for New Particles in Two-Jet Final States in 7 TeV Proton-Proton Collisions with the ATLAS Detector at the LHC** *PHYSICAL REVIEW LETTERS*
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- **An algorithm for nonlinear optimization problems with binary variables** *COMPUTATIONAL OPTIMIZATION AND APPLICATIONS*
Murray, W., Ng, K.
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- **Charged-particle multiplicities in pp interactions at root s=900 GeV measured with the ATLAS detector at the LHC** *ATLAS Collaboration PHYSICS LETTERS B*
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- **Muscle moment arms in the first dorsal extensor compartment after radial malunion. A cadaver study.** *journal of bone and joint surgery. American volume*
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- **The ATLAS Experiment at the CERN Large Hadron Collider** *JOURNAL OF INSTRUMENTATION*
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- **George B. Dantzig and systems optimization** *DISCRETE OPTIMIZATION*
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- **A local relaxation approach for the siting of electrical substation** *COMPUTATIONAL OPTIMIZATION AND APPLICATIONS*
Murray, W., Shanbhag, U. V.
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- **Design and control of libration point spacecraft formations** *AIAA Guidance, Navigation and Control Conference*
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- **ON THE IDENTIFICATION OF LOCAL MINIMIZERS IN INERTIA-CONTROLLING METHODS FOR QUADRATIC-PROGRAMMING** *SIAM JOURNAL ON MATRIX ANALYSIS AND APPLICATIONS*
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