

Submitted:

- “Implicitly Dealiased Convolutions on Shared Memory Architectures”. By Malcolm Roberts and John C. Bowman. In: *SIAM Journal of Scientific Computing* (2016). Submitted. URL: <http://malcolmroberts.github.io/publications/dealias2.pdf>
- *SEME 2016: OptionWay Project Report*. By Malcolm Roberts et al. 2016

Peer-Reviewed Articles:

- “Asynchronous OpenCL/MPI numerical simulations of conservation laws”. By Philippe Helluy et al. In: *Lecture Notes in Computational Science and Engineering* (2016). To appear. URL: <http://malcolmroberts.github.io/publications/sppexa2016.pdf>
- “Lagrangian/Eulerian Solvers and Simulations for Vlasov”. By Sebastien Guisset et al. In: *ESAIM: Proceedings and Surveys* (2016). To appear. URL: <http://malcolmroberts.github.io/publications/lessive-cemracs2014.pdf>
- “Adaptive Matrix Transpose Algorithms for Distributed Multicore Processors”. By John C Bowman and Malcolm Roberts. In: *Interdisciplinary Topics in Applied Mathematics, Modeling and Computational Science*. Springer, 2015, pp. 97–103. URL: <http://malcolmroberts.github.io/publications/transpose0.pdf>
- “Self-organization of helically forced MHD flow in confined cylindrical geometries”. By Malcolm Roberts et al. In: *Fluid Dynamics Research* 46.6 (2014), p. 061422. URL: <http://stacks.iop.org/1873-7005/46/i=6/a=061422>
- “Pseudospectral Reduction of Incompressible Two-Dimensional Turbulence”. By John C. Bowman and Malcolm Roberts. In: *Communications in Nonlinear Science and Numerical Simulation* 17.5 (2012), pp. 2008–2013. URL: <http://malcolmroberts.github.io/publications/psr.pdf>
- “Efficient Dealiased Convolutions without Padding”. By John C. Bowman and Malcolm Roberts. In: *SIAM J. Sci. Comput.* 33.1 (2011), pp. 386–406. URL: <http://malcolmroberts.github.io/publications/>

`dealias.pdf`

- “Dealised convolutions for pseudospectral simulations”. By Malcolm Roberts and John C. Bowman. In: *Journal of Physics: Conference Series* 318.7 (2011), p. 072037. URL: <http://stacks.iop.org/1742-6596/318/i=7/a=072037>
- “Links between dissipation, intermittency, and helicity in the GOY model revisited”. By J. C. Bowman et al. In: *Physica D* 218 (2006), pp. 1–10. URL: <http://malcolmroberts.github.io/publications/smallscales.pdf>

Dissertations:

- “Multispectral Reduction of Two-Dimensional Turbulence”. By Malcolm Roberts. PhD thesis. Edmonton, AB, Canada: University of Alberta, 2011. URL: http://malcolmroberts.github.io/publications/roberts_phd.pdf
- “A Multi-Spectral Decimation Scheme for Turbulence Simulations”. By Malcolm Ian William Roberts. MA thesis. University of Alberta, 2006. URL: http://malcolmroberts.github.io/publications/roberts_msc.pdf

Conference Proceedings:

- “The Multispectral Method: Progress and Prospects”. By Malcolm Roberts, John C Bowman, and Bruno Eckhardt. In: *Advances in Turbulence XII*. Springer, 2009, pp. 791–794. URL: <http://malcolmroberts.github.io/publications/etc12articleroberts.pdf>
- *Report on the Math-Stat Graduate Education Round table*. By Malcolm Roberts. 2011. URL: <http://malcolmroberts.github.io/publications/report10w2062.pdf>
- *General Statistical Design of an Experimental Problem for Harmonics*. By Sean Bohun et al. 2008. URL: <http://malcolmroberts.github.io/publications/etc12articleroberts.pdf>

Software:

- `FFTW++`: *A fast Fourier transform C++ header class for the FFTW3 library*. By John C. Bowman and Malcolm Roberts. 2010-2016. URL: <http://fftwpp.sourceforge.net>
- `clFFT++`: *A fast Fourier transform C++ header class for the clFFT library*. By Malcolm Roberts. 2016. URL: <https://github.com/dealias/clfftpp>

- **schnaps**: *Solver for Conservative Hyperbolic Non-linear systems Applied to PlasmaS*. by Malcolm Roberts, Philippe Helluy, and Emmanuel Franck. 2015-2016. URL: <https://schnaps.gforge.inria.fr>
- **FLUSI**: *Fluid-Structure-Interaction / MHD Research Code*. By Thomas Engels, Malcolm roberts, and Dmitry Kolomenskiy. 2015-2016. URL: <https://github.com/pseudospectators/FLUSI>

Other Publications:

- *Notes for Differential Equations*. By Malcolm Roberts and Samantha Marion. 2015. URL: <https://github.com/malcolmroberts/denotes>