Found. Comput. Math. (2003) 3:111 © 2003 SFoCM

DOI: 10.1007/s10208-003-0087-9



Editorial

This issue of *Foundations of Computational Mathematics* is dedicated to Professor M.J.D. Powell from the University of Cambridge, on the occasion of his 65th birthday and in celebration of his contribution to computational mathematics.

Mike Powell's enduring contribution to approximation theory and to optimization has been decisive, not least to our understanding of convergence and performance of optimization algorithms, to the study of properties of spline functions, and to the theory of multivariate approximation. We wish to place on record another major aspect of Mike's work, which makes it particularly relevant to *Foundations of Computational Mathematics*. There exists a residual sentiment among some of our colleagues that there is a contradiction between "computational mathematics" and "scientific computing": the first is about proving theorems and following the agenda of pure mathematics, while the second is applied and addresses itself to the practical needs of scientists and engineers and to implementational issues. Mike's research is a salutary example of the wonderful synergy between computational mathematics and scientific computing at their very best.

This issue contains a number of papers related to some of the areas in which Mike has worked. Limitations of space forced the editors to consign other papers, originally intended for this issue, to other issues of the journal.

Mike has recently retired from the John Humphrey Plummer Professorship in Applied Numerical Analysis. In practical terms, this means that he has more time to pursue his research. We wish to celebrate both his past and future contribution to our subject.

Ron DeVore Arieh Iserles Michael Todd