

Optimal Rational Interpolation in Approximation and Boundary Value Problems

Between 1997 and 2005 Prof. Mittelmann published a dozen papers on the use of barycentric rational interpolation. This is a powerful technique that had not been well-known. He applied it first to the approximation of functions with steep gradients and boundary layers achieving great improvements over other approaches. Then, he extended these results to boundary value problems for differential equations.