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Abstracts of Short Communications and Posters

Section:

15. Numerical Analysis and Scientific Computing

1991 MS Classification: 35, 42, 65, 76
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Some remarks on divergence free vector wavelets
Divergence free vector wavelets were introduced in the early 90's by G. Battle, P. Federbush and the author. They have been applied to the analysis of the Stokes equation or the Navier-Stokes equation, both numerically (K. Urban) and theoretically (P. Federbush, M. Cannone). In this short communication, we would like to present some shortcomings of this approach and some promising outlooks, with a specific stress on comparison with spectral methods.