AMERICAN MATHEMATICAL SOCIETY
MathSciNet Mathematical Reviews on the Web

Navigate MathSciNet
Jump to Search or Browse Screens

Item: **77** of **91** | Return to headlines | First | Previous | Next | Last

MSN-Support | Help

Select alternative format: BibTeX | ASCII

MR935160 (90a:65041)

Gottlieb, David (IL-TLAV); **Tadmor, Eitan** (IL-TLAV)

Recovering pointwise values of discontinuous data within spectral accuracy.

Progress and supercomputing in computational fluid dynamics (*Jerusalem*, 1984), 357–375, *Progr. Sci. Comput.*, 6, *Birkhäuser Boston, Boston, MA*, 1985.

65D15

Journal | Article | Doc Delivery

References: 0 | **Reference Citations: 6** | **Review Citations: 2**

The authors are concerned with the problem of how pointwise values of a function $f\colon \mathbf{R} \to \mathbf{R}$ can be recovered from the information contained in either its spectral or pseudospectral approximations. A method is given whose accuracy depends solely on the (local) smoothness of f in the neighborhood of the point $x \in \mathbf{R}$ of interest. If, in particular, f is infinitely smooth in that neighborhood, then the functional value $f(x)$ is approximated within infinite order of accuracy.

{For the entire collection see MR 88k:65003}

Reviewed by *W. Freeden* (Zbl 597:65099)

© *Copyright American Mathematical Society 1990, 2004*