

THE VALÈNCIA SOFTWARE

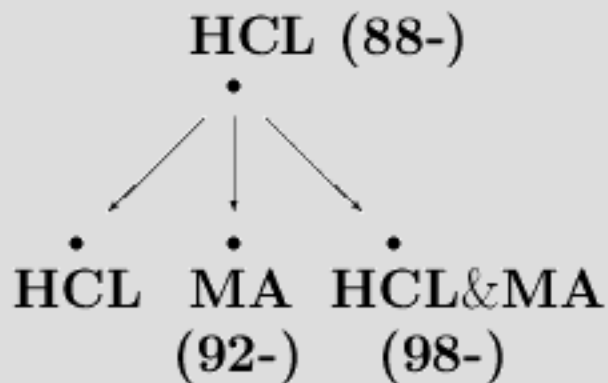
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Mini-Workshop on
Wavelet and Multiscale Software
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History



Hardware

- HP workstations
- PCs under Linux
- Beowulf Cluster: 8 Pentium II 350 MHz + Fast Ethernet Switch.


Multiresolution Analysis

With Fortran and Matlab:

- Limit functions. Stability.
- Coding-decoding. Compression.
- Zoom.
- etc.

Demo Coding-Decoding:


points: 1024

A horizontal slider control with a vertical bar in the center and arrowheads at both ends.

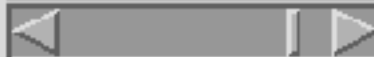
scales: 7

A horizontal slider control with a vertical bar in the center and arrowheads at both ends.

reconst. order: 1

A horizontal slider control with a vertical bar in the center and arrowheads at both ends.


tolerance: $1.0e-02$

A horizontal slider control with a vertical bar in the center and arrowheads at both ends.


Function

kink 


Reconstruction

Periodic 

q s.t. $tol_k \sim tol_c^k$

1 

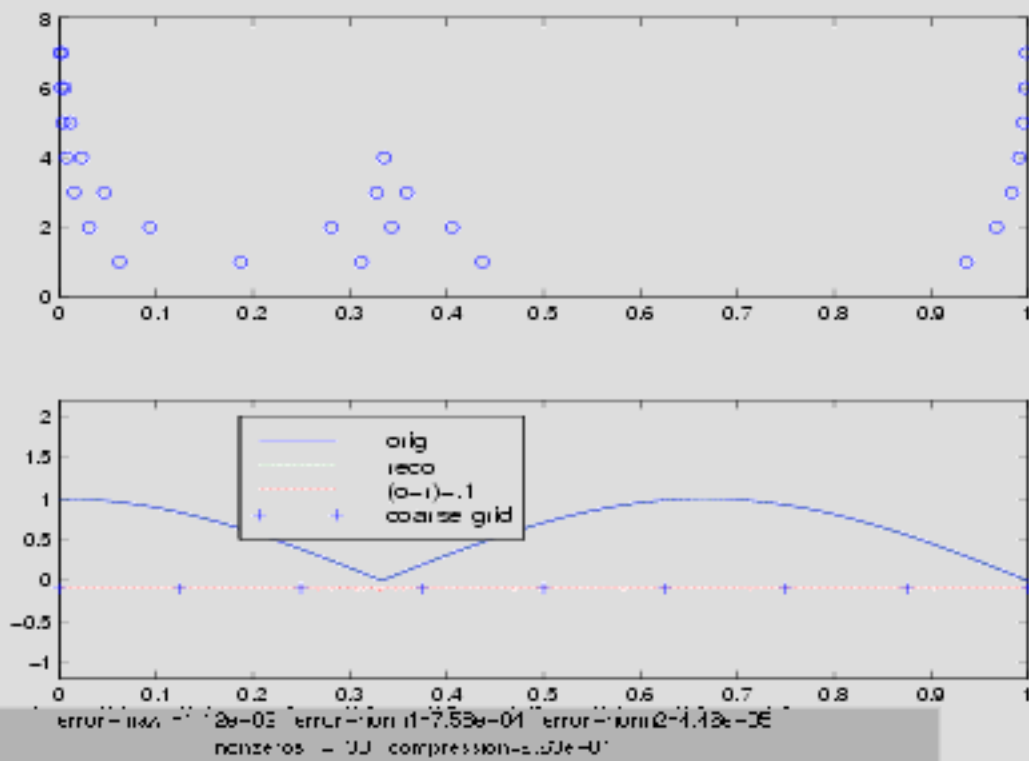
Discretization

Pcint 

Run

Quit

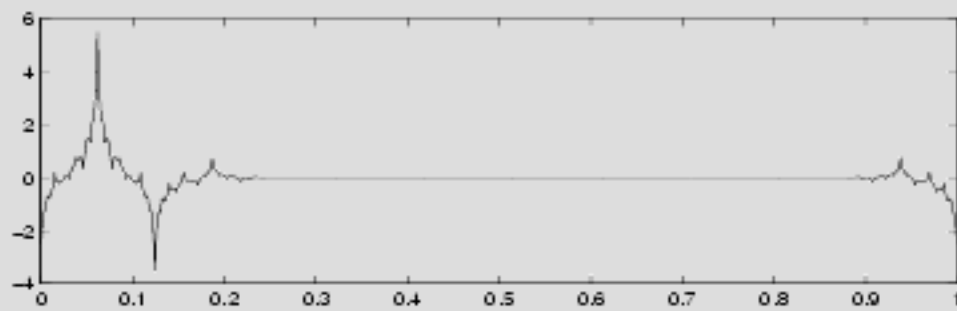
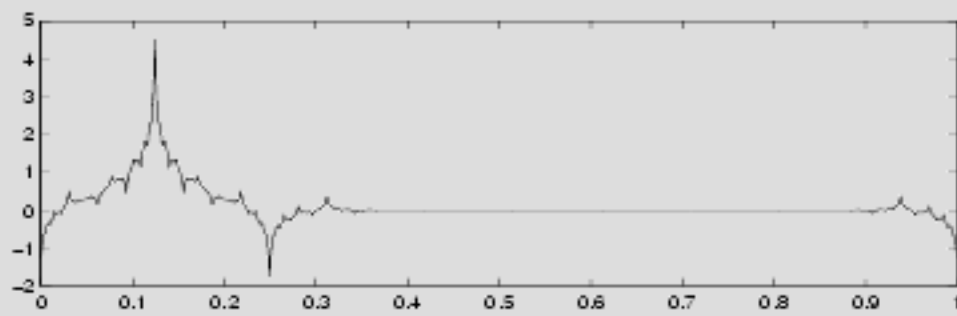
We obtain:



Demo Basis:

| | |
|---|--|
| <p>Discretization</p> <p>Hat <input type="checkbox"/></p> | <p>Reconstruction</p> <p>Periodic <input type="checkbox"/></p> |
| <p># p. finest level: 1024</p> <p>◀ ▶</p> | <p># p. coarse level: 8</p> <p>◀ ▶</p> |
| <p>reconst. order: 2</p> <p>◀ ▶</p> | <p>base: 1 <= 8</p> <p>◀ ▶</p> |
| <p>Run</p> | <p>Quit</p> |

We obtain with periodicity:



or without

