

Professional Applied Mathematics and Matrix Computation

with PC-MATLAB on your IBM-PC
and now PRO-MATLAB for your
Sun Workstation or
VAX computer

The popular PC-MATLAB is now available on larger computers! PC-MATLAB, called PRO-MATLAB on big machines, is the premier interactive program available for numerical linear algebra and matrix computation.

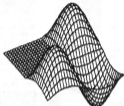
Matrix and Analytical Computation
MATLAB has tools for diverse applied mathematical needs. These include linear algebra functions like eigenvalues, linear equation solution, least-squares, singular value decomposition, and almost anything else you can think of to do with matrices. MATLAB is also chock full of other analytical capabilities including complex and polynomial arithmetic, FFT's, digital filtering and multivariate statistics. Altogether, there are over 200 commands available.

Easy-to-use

This we guarantee. Matrix calculations are indicated to MATLAB in a manner similar to how they are written on paper. Finally you'll have a program with a modern user interface to mathematically sophisticated calculations!

LINPACK Benchmark in MATLAB

Machine	Kflop/s
Sun-2	4
IBM-PC	15
Sun-3/52	81
MicroVAX II	98



*Eigenfunction of an
L-shaped Membrane*

Integrated and Extensible

The precision 2-d and 3-d graphics, data manipulation facilities, and extensibility features will meet all your professional analysis and reporting needs.

An Open System

Many of MATLAB's features are implemented in programmable *M-files*, made possible because of MATLAB's open-system philosophy. Since MATLAB is the teaching and research system chosen by Engineering, Computer Science and Mathematics departments at most leading universities, you can look forward to an exciting future of new algorithmic developments from leading experts in mathematical software.

Fast, Accurate and Reliable

PRO-MATLAB not only solves your matrix problems - it does it fast too. On a PC the numeric coprocessor is fully utilized for near minicomputer performance. For example, it takes only 1 second to multiply 20 x 20 matrices and 2.9 seconds to invert them. A 1024 point FFT finishes in 2.8 seconds! On larger machines, the efficient C code is even more remarkable. You won't have to question the results either - the numerical algorithms have been programmed by leading experts in mathematical software. Intermediate calculations use extended 80-bit precision, exceeding the accuracy of many mainframes. Final results are IEEE standard 64-bit numeric format (VAX formats differ).

Please provide additional information:

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Company _____
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State/Zip _____
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