

# MSOLVE

Mslv: solve non linear system (0.6s emulator)	6: 5: 4: 3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM	6: 5: 4: 3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM
V→F: insert solutions (0.2s)		
Mslv: solve non linear system (0.6s)	5: 4: 3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM	5: 4: 3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM
Mslv: solve non linear system (0.9s)		
Mslv: solve non linear system (0.7s)	4: 3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM	8: 7: 6: 5: 4: 3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM
Mslv: with complex start vector (0.3s)		
Mslv: solve underdetermined non linear system (0.8s) insert solution (0.3s)	4: 3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM	5: 4: 3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM
Mslv: solve underdetermined linear system (0.5s)		
Mslv: solve nonlin. system with parameters a=1, b=3 stored in actual dir (2s)	3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM	2: 1: Msex Mslv V+F VviewVpurgeHelpM
Mslv: solve nonlinear system (1.6s)		
Mslv: solve nonlinear system (0.9s)	3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM	6: 5: 4: 3: 2: 1: Msex Mslv V+F VviewVpurgeHelpM
Mslv: solve overdetermined system (0.3s)		
HelpMSOLVE: help	MSOLVE: NUMERICAL SOLUTION OF NONLINEAR SYSTEMS [F1..Fn] WITH STARTVECTORS [X10..XN0] [F1..Fn] = ['F1(XK)'. . 'Fn(XK)'] RIGHT SIDES OF EQNS = 0  Msex CHOOSEBOX WITH EXAMPLES Mslv [F1..Fn] [X10..XN0] + [F1..Fn] [X1..XK] 4 [X10..XN0] = STARTVECTOR WITH INDEPENDENT VARIABLES IN ALPHABETIC ORDER. +SHIP[SHIP+] +DEL DEL+ [DEL L] INS =	OBTAIN ORDER WITH LNAME [F1..Fn] [X10..XN0] + [F1..Fn] [F1(XJ0) .. Fn(XJ0)] INSERT SOLUTIONS IN SYSTEM. ABS GIVES ERROR Vview _ + - SWITCH TO VERTICAL VIEW OF VECTOR AND BACK Vpurge _ + - PURGE ALL REAL VARS IN CURRENT DIRECTORY EqnARRAY 'Eqn'.. 'Eq1' ↔ [..] EQNS IN STACK ↔ ARRAY +SHIP[SHIP+] +DEL DEL+ [DEL L] INS =
HelpMSOLVE: help	MSOLVE WORKS WITHOUT STARTVECTOR ASSUMING [1..1] AS STARTVALUES. Mslv NOW WORKS FOR UNDER/OVER- DETERMINED SYSTEMS SEE Msex. Mslv STOPS AFTER 10sec IF EQTOL>1E-10 WITH THE MESSAGE: NO SOLUTION FOUND? AND APPROXIMATIVE SOLUTIONS. THEN +SHIP[SHIP+] +DEL DEL+ [DEL L] INS =	YOU CAN KEEP PARAMETERS IN THE EQNS IF THEY ARE DEFINED AS GLOBAL VARS IN THE CURRENT DIR. SEE EXAMPLE IN Msex WITH PARAMETERS a,b. STORING OTHER VALUES YOU CAN AGAIN RUN Mslv. PURGE PARAMETERS WITH Vpurge. 4 WITH A COMPLEX STARTVECTOR YOU FIND COMPLEX SOLUTIONS. SEE +SHIP[SHIP+] +DEL DEL+ [DEL L] INS =