Codes

1.1	matic Python forelse.py	12
1.2	plotex.py	14
1.3	vectorfield.py	23
	bers	
2.1	kahansum.py	48
2.2 2.3	naiveval.py	50 52
2.3	<pre>compexp.py recforw.py</pre>	56
2.5	recback.py	57
2.6	cancel.py	59
2.7	chargearray.py	64
2.8	legendre.py	70
2.9	multipole.py	75
	vatives	
3.1	finitediff.py	94
3.2 3.3	richardsondiff.py	104 113
3.4	psis.py kinetic.py	116
5.4	KINCELE. Py	110
Matr		150
4.1 4.2	triang.py gauelim.py	150 157
4.3	ludec.py	163
4.4	gauelim_pivot.py	169
4.5	jacobi.py	174
4.6	power.py	180
4.7	invpowershift.py	185
4.8	qrdec.py	191 202
4.9 4.10	qrmet.py eig.py	202 204
4.11	kron.py	227
4.12	twospins.py	228
4.13	threespins.py	231
Root	ts	
5.1	fixedpoint.py	253
5.2	bisection.py	260
5.3	secant.py	268
5.4	legroots.py	276
5.5 5.6	<pre>multi_newton.py descent.py</pre>	284 294

xviii Codes

Appr	oximation	
6.1	barycentric.py	327
6.2	splines.py	339
6.3	triginterp.py	347
6.4	fft.py	360
6.5	linefit.py	367
6.6	normalfit.py	375
6.7	blackbody.py	383
Integ	rals	
7.1	newtoncotes.py	413
7.2	adaptive.py	418
7.3	romberg.py	426
7.4	gauleg.p <u>y</u>	438
7.5	montecarlo.py	463
7.6	eloc.py	477
7.7	vmc.py	484
Diffe	rential equations	
8.1	ivp_one.py	514
8.2	$ivp_two.py$	525
8.3	bvp_shoot.py	532
8.4	<pre>bvp_matrix.py</pre>	535
8.5	evp_shoot.py	540
8.6	evp_matrix.py	544
8.7	poisson.py	551