Free propagation of a Gaussian wavepacket (at t = 5.000) 0.040 -FTCS scheme normalised to 1.0135Analytical solution 0.0350.030 -Probability density $|\Psi(x,t)|^2$ 0.010 0.0050.000 --1510 15 20 -20-10-50 5 Spatial dimension x