

Contents

```
! Testes de tempo para algoritmo da transformada de Fourier. implicit
real*8(a-h, o-y) implicit complex*16(z-z) dimension N(1:4) parameter(N =
(50, 100, 200, 400)) parameter(pi = acos(-1.0e0)) zi = (0.0, 1.0)
dimension signal(N) dimension zYn(N) zi = (0.0, 1.0)
open(10, file="output-signal.dat")
t = 0.0e0 do i = 1, N read(10, *) t, signal(i) end do dt = t / N
open(11, file="output-dft.dat") zeta = exp(2*pi*zi/N) do l = 1, N zYl
= signal(1) do m = 1, N zYl = zYl+signal(m)*zeta**(m*l) end do zYn(l) =
zYl write(11, *) 1/(N*dt*2*pi),real(zYl),aimag(zYl) end do close(10)
```