

PARALLEL CODE: FOURIER TRANSFORM 2

COMPLEX TO COMPLEX FFT

A(N) -> B(N)
complex complex

COMPLEX FFT, LENGTH N -- ORDERING

Real	k = 0 1 2 3 ... (N/2-2) (N/2-1) (+-N/2) -(N/2-1) -(N/2-2) ... -3 -2 -1
Imag	k = 0 1 2 3 ... (N/2-2) (N/2-1) (+-N/2) -(N/2-1) -(N/2-2) ... -3 -2 -1

REAL TO COMPLEX FFT

A(N) -> B(N/2 +1)
real complex
(Only store positive frequencies)

DEALIAS, RE-PACK

Real	k = 0 1 2 3 ... (N/2-2) (N/2-1) (+-N/2) -(N/2-1) -(N/2-2) ... -3 -2 -1
Imag	k = 0 1 2 3 ... (N/2-2) (N/2-1) (+-N/2) -(N/2-1) -(N/2-2) ... -3 -2 -1



Real	k = 0 1 2 3 ... (ND/2) -(ND/2) ... -3 -2 -1
Imag	k = 0 1 2 3 ... (ND/2) -(ND/2) ... -3 -2 -1