

	A.E. $N = 10$	R.E. $N = 10$	A.E. $N = 20$	R.E. $N = 20$	A.E. $N = 30$	R.E. $N = 30$
b	$2,331\,5 \cdot 10^{-15}$	$2,576\,7 \cdot 10^{-15}$	$2,331\,5 \cdot 10^{-15}$	$2,576\,7 \cdot 10^{-15}$	$3,219\,6 \cdot 10^{-15}$	$3,558\,3 \cdot 10^{-15}$
f	$2,220\,4 \cdot 10^{-15}$	$2,454\,0 \cdot 10^{-15}$	$2,775\,6 \cdot 10^{-15}$	$3,067\,5 \cdot 10^{-15}$	$3,219\,6 \cdot 10^{-15}$	$3,558\,3 \cdot 10^{-15}$
g	$2,664\,5 \cdot 10^{-15}$	$2,944\,8 \cdot 10^{-15}$	$2,997\,6 \cdot 10^{-15}$	$3,312\,9 \cdot 10^{-15}$	$3,663\,7 \cdot 10^{-15}$	$4,049\,1 \cdot 10^{-15}$
j	$1,613\,1 \cdot 10^{+00}$	$9,956\,0 \cdot 10^{-1}$	$1,618\,5 \cdot 10^{+00}$	$9,989\,0 \cdot 10^{-1}$	$1,597\,3 \cdot 10^{+00}$	$9,858\,3 \cdot 10^{-1}$
k	$1,618\,6 \cdot 10^{+00}$	$9,989\,8 \cdot 10^{-1}$	$5,223\,7 \cdot 10^{-5}$	$3,224\,0 \cdot 10^{-5}$	$1,501\,8 \cdot 10^{+00}$	$9,268\,7 \cdot 10^{-1}$

Table 1: Table Interp

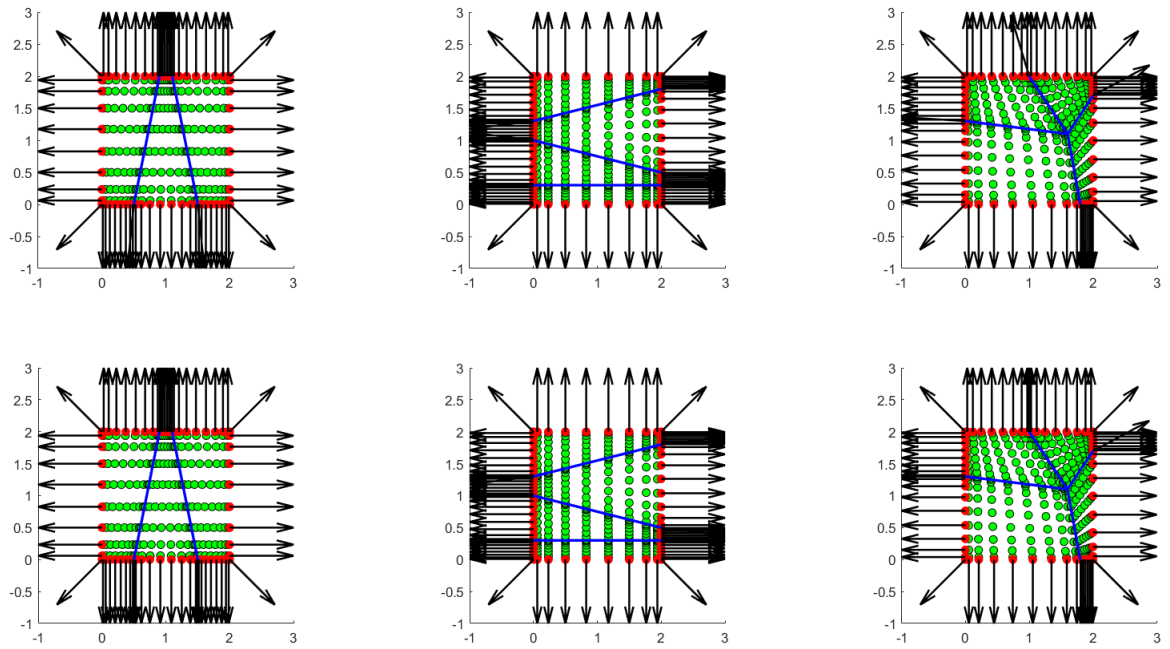


Figure 1: Normal override (bottom) vs original normals (top)

Questions Mutishape:

- Normal Overwriting, Figure 1 and 'zoom in' Figures 2, 3 and 4.
- Interpolation testing (see below)
- InterpolationPhys Code, mapping to polars for all y
- Why is interpolation always in comp space
- Convolution in Multishape: Int for polars

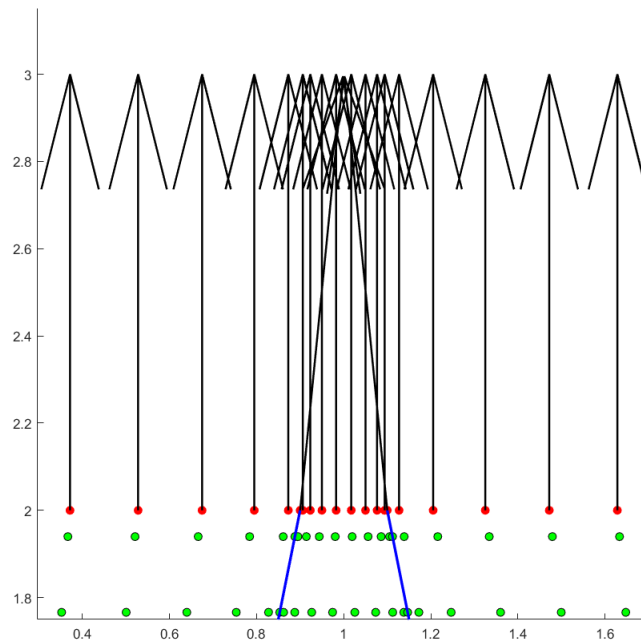


Figure 2: Discretization 1

- Why 2 matching conditions?
- FFT Interpolation formula
- Polar Diff at $r = 0$?
- Wedge linear, quadrilateral bilinear. why?
- Algorithm writing...

If we interpolate from a multishape (b) onto itself we get an error of 0.1028, however, if we plot the error it does not match, see Figure 5.

When we interpolate both multishapes (a), (b) onto a uniform grid and plot the error, we get the error 0.1301, which is displayed in Figure 6.

Not related to multishape: Is DDFT valid for \mathbf{w} which is not ∇V ?

DDFT Talk: What to focus on?

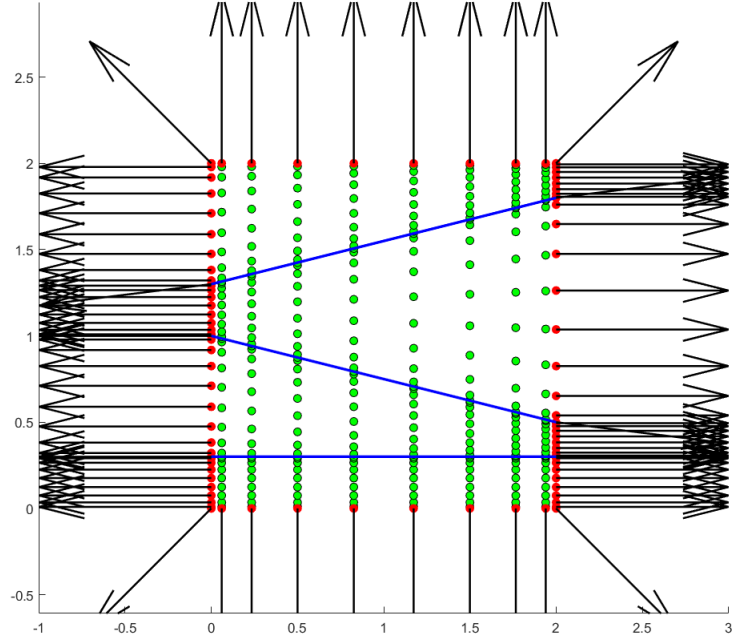


Figure 3: Discretization 2

	A.E. $N = 10$	R.E. $N = 10$	A.E. $N = 20$	R.E. $N = 20$	A.E. $N = 30$	R.E. $N = 30$
b	$0,000\,0 \cdot 10^{+00}$	$0,000\,0 \cdot 10^{+00}$	$4,440\,9 \cdot 10^{-16}$	$1,493\,7 \cdot 10^{-16}$	$8,881\,8 \cdot 10^{-16}$	$2,987\,3 \cdot 10^{-16}$
f	$0,000\,0 \cdot 10^{+00}$	$0,000\,0 \cdot 10^{+00}$	$0,000\,0 \cdot 10^{+00}$	$0,000\,0 \cdot 10^{+00}$	$8,881\,8 \cdot 10^{-16}$	$2,987\,3 \cdot 10^{-16}$
g	$0,000\,0 \cdot 10^{+00}$	$0,000\,0 \cdot 10^{+00}$	$4,440\,9 \cdot 10^{-16}$	$1,493\,7 \cdot 10^{-16}$	$8,881\,8 \cdot 10^{-16}$	$2,987\,3 \cdot 10^{-16}$
j	$2,408\,5 \cdot 10^{-8}$	$3,762\,1 \cdot 10^{-9}$	$1,776\,4 \cdot 10^{-15}$	$2,774\,6 \cdot 10^{-16}$	$2,664\,5 \cdot 10^{-15}$	$4,162\,0 \cdot 10^{-16}$
k	$2,733\,4 \cdot 10^{-11}$	$4,269\,5 \cdot 10^{-12}$	$1,776\,4 \cdot 10^{-15}$	$2,774\,6 \cdot 10^{-16}$	$1,776\,4 \cdot 10^{-15}$	$2,774\,6 \cdot 10^{-16}$

Table 2: Table Int

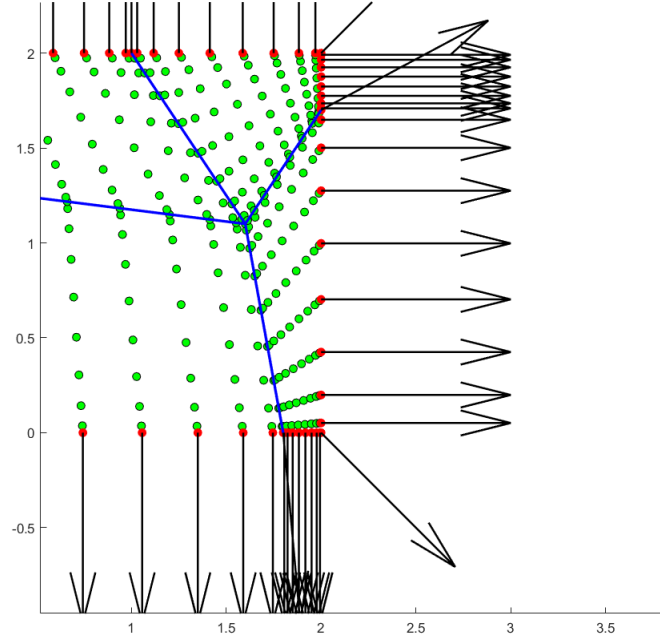


Figure 4: Discretization 3

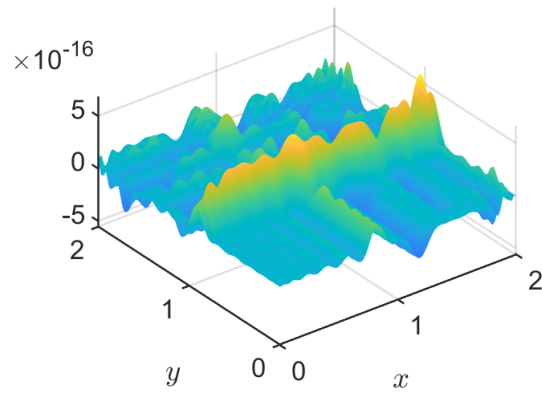


Figure 5: Error InterpPhys

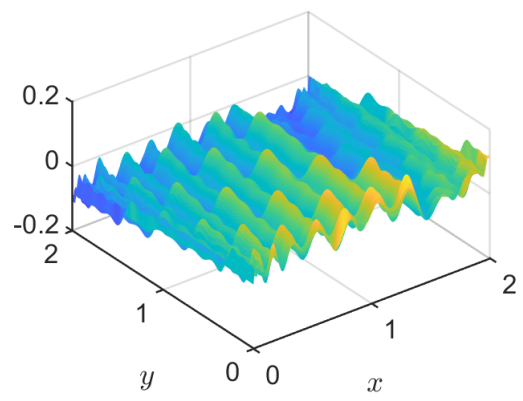
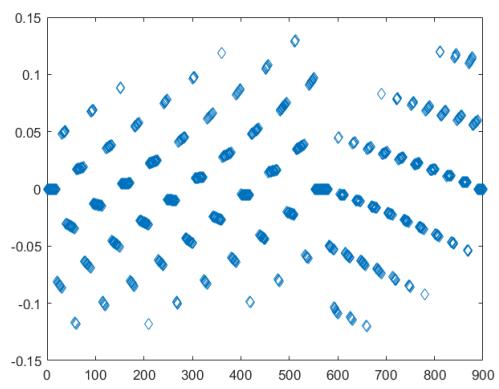


Figure 6: Error InterpUni