

# Benchmark 1

February 20, 2006

BlockTypes:

- 1: Lineclusters + AFW
- 2: Lineclusters + AFW(hoEdges)
- 3: Lineclusters (wie alter HCurl) AFW(hoEdges) + all to vertical Quads

## order 1

hcurl, order 2, A = 1 MB				
smoothing	$\kappa(C^{-1}A)$	iterations	time [s]	MB
sbAFW	2.25	12	0.93	

hcurlho, order 1, A = 0.97 MB				
smoothing	$\kappa(C^{-1}A)$	iterations	time [s]	MB
1	8.6	33	1.78	1.33
2	2.7	12	0.93	1.1
3	2.7	12	0.93	1.1

## order 2

hcurl, order 3, A = 32 MB				
smoothing	$\kappa(C^{-1}A)$	iterations	time [s]	MB
sbAFW	4.8	17	8.34	26

<b>hcurlho, order 2, A = 32 MB</b>				
smoothing	$\kappa(C^{-1}A)$	iterations	time [s]	MB
1	35.6	64	14.7	3
2	10.5	35	9.9	11
3	3.5	17	6.7	26

## Higher Order

<b>hcurlho, order 3, A =</b>				
smoothing	$\kappa(C^{-1}A)$	iterations	time [s]	MB
1	81.5	94	57	
2	32	58	39	
3	7.2	25	38	

<b>hcurlho, order 4, A = 466 MB</b>				
smoothing	$\kappa(C^{-1}A)$	iterations	time [s]	MB
2	74	89	198	60
3	11	33	183	480