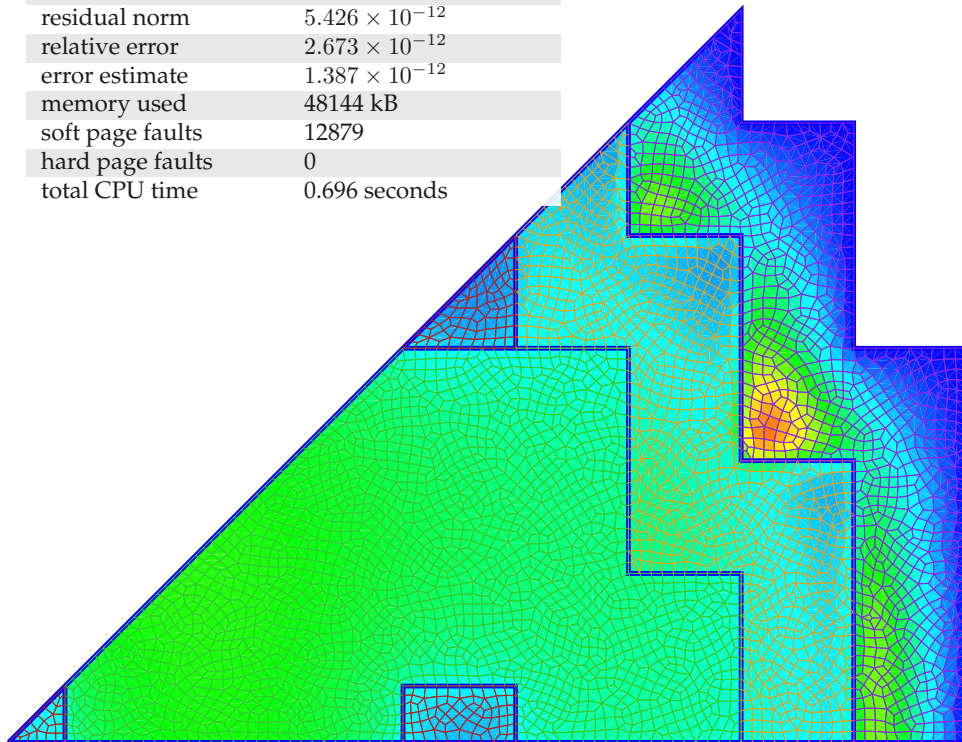


milonga's 2D LWR IAEA Benchmark Problem case #053
 eighth-symmetry core meshed using delaunay (quads, $\ell_c = 2$) solved with finite volumes

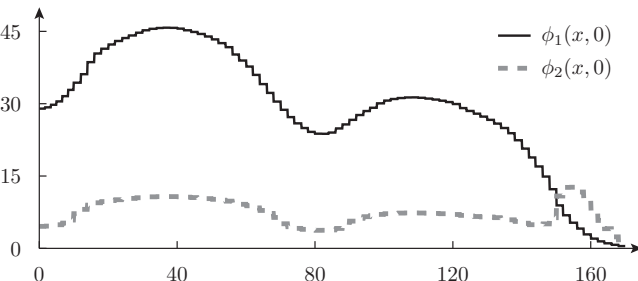
largest eigenvalue k_{eff}	1.029966 (2909.42 pcm)
max $\phi_2(x, y)$ @core	11.10 @ (31.85, 30.64)
max $\phi_2(x, y)$ @reflector	11.70 @ (130.75, 50.81)
number of unknowns	7960
outer iterations	3
linear iterations	32
inner iterations	995
residual norm	5.426×10^{-12}
relative error	2.673×10^{-12}
error estimate	1.387×10^{-12}
memory used	48144 kB
soft page faults	12879
hard page faults	0
total CPU time	0.696 seconds

k	P_k	ϕ_{1k}	ϕ_{2k}
1	0.72	31.77	5.35
2	1.30	41.45	9.62
3	1.44	45.36	10.65
4	1.20	38.31	8.90
5	0.59	26.28	4.40
6	0.95	30.24	7.02
7	0.95	29.85	7.02
8	0.76	20.76	5.64
9	—	3.18	7.81
10	1.42	44.88	10.53
11	1.47	46.22	10.85
12	1.31	41.27	9.68
13	1.07	34.20	7.95
14	1.04	32.95	7.73
15	0.96	30.25	7.13
16	0.73	20.26	5.45
17	—	3.02	7.41
18	1.46	45.96	10.79
19	1.34	42.24	9.91
20	1.18	37.11	8.71
21	1.07	33.84	7.96
22	0.98	29.28	7.27
23	0.68	16.83	5.02
24	—	2.19	5.46
25	1.19	37.47	8.79
26	0.98	31.07	7.23
27	0.91	28.75	6.77
28	0.84	22.62	6.19
29	—	5.65	12.31
30	—	0.67	2.62
31	0.46	20.19	3.39
32	0.69	20.81	5.10
33	0.57	14.47	4.24
34	—	2.16	5.63
35	0.56	14.11	4.17
36	—	3.68	8.16
37	—	0.53	2.04
38	—	0.60	2.38

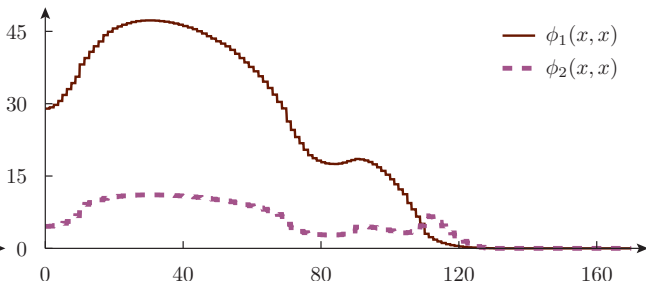


(a) Mesh and thermal flux distribution

(b) Power and fluxes



(c) Flux distribution $\phi_g(x, 0)$ along the x axis



(d) Flux distribution $\phi_g(x, x)$ along the diagonal