

Supplemental material

Piecewise linear mapping optimization based on the complex view

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1. Parameterization Results

We provide histograms showing the distribution of timings and number of iterations per method and energy. The runtimes are divided by the number of vertices in each mesh for the histograms. Following the histograms, are the collected statistics for all the test cases.

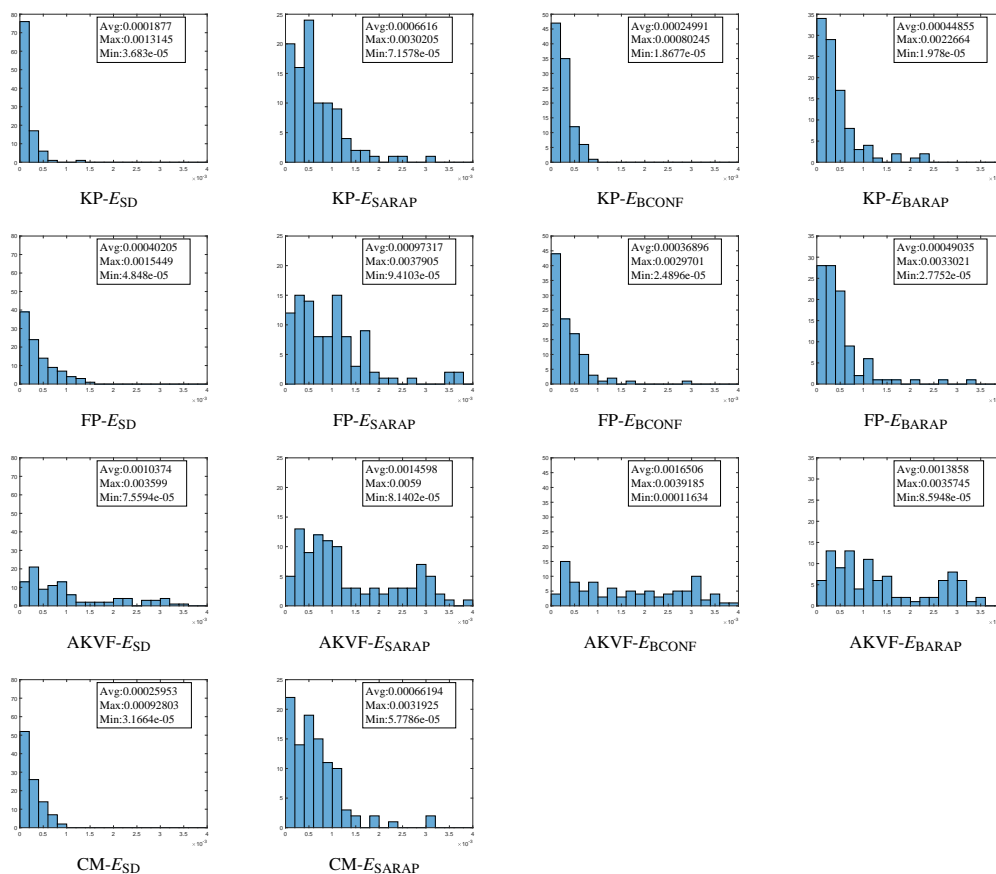


Figure 1: Histograms of runtimes (in seconds) divided by the number of vertices for each method and energy.

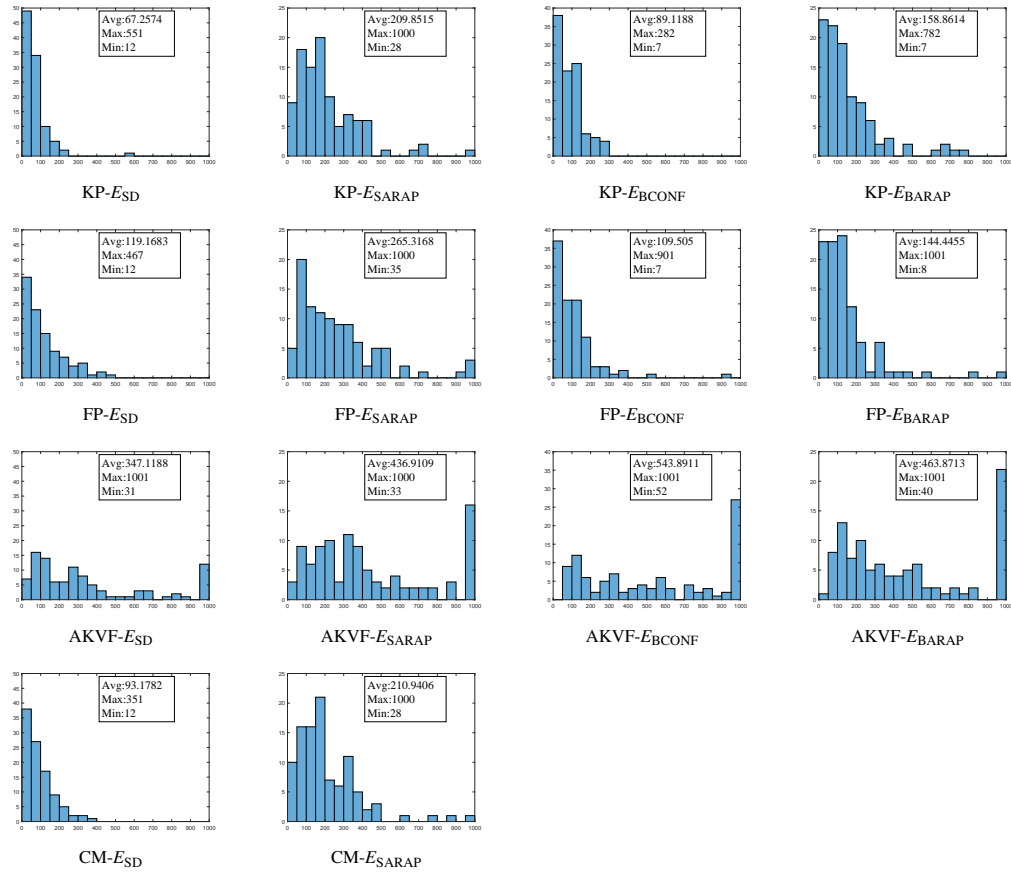


Figure 2: Histograms of the number of iterations for each method and energy.

The triplets in each column denote: number of iterations / total runtime / final energy. For each mesh, the method with the lowest runtime is denoted in bold. The method with the lowest number of iterations is underlined.

Table 1: Parameterization E_{SD} Result Table

Nr.	Model	Vertices	KP	CM	FP	AKVF
1	plane-sphere	4951	13 / 0.182 / 2.0875	<u>12</u> / 0.157 / 2.0875	13 / 0.240 / 2.0875	44 / 0.625 / 2.0875
2	pulley100K	71679	<u>44</u> / 9.768 / 2.0134	73 / 16.357 / 2.0133	90 / 23.402 / 2.0133	302 / 71.875 / 2.0132
3	pulley200K	122426	<u>41</u> / 16.345 / 2.0321	75 / 30.503 / 2.0321	97 / 45.066 / 2.0321	628 / 263.720 / 2.0321
4	ramses	63639	<u>40</u> / 8.001 / 2.0226	66 / 12.632 / 2.0226	72 / 15.978 / 2.0226	173 / 34.512 / 2.0225
5	retinal	6493	<u>23</u> / 0.344 / 2.0208	<u>23</u> / 0.360 / 2.0208	37 / 0.766 / 2.0208	67 / 1.062 / 2.0208
6	bumpy_sphere	8055	<u>15</u> / 0.322 / 2.0251	16 / 0.325 / 2.0251	16 / 0.396 / 2.0251	61 / 1.217 / 2.0251
7	rocker_arm	16862	<u>30</u> / 1.260 / 2.0086	44 / 1.852 / 2.0086	48 / 2.586 / 2.0086	129 / 5.620 / 2.0086
8	santa	108299	<u>62</u> / 18.997 / 2.0089	142 / 43.117 / 2.0090	152 / 53.772 / 2.0089	283 / 87.431 / 2.0088
9	screwdriver	37610	<u>27</u> / 2.857 / 2.0075	44 / 4.662 / 2.0075	62 / 8.134 / 2.0075	153 / 17.340 / 2.0075
10	sculpt	10370	<u>50</u> / 1.259 / 2.0065	56 / 1.402 / 2.0065	66 / 2.152 / 2.0065	111 / 2.904 / 2.0065
11	sediapatch1_100K	64172	<u>43</u> / 7.243 / 2.0092	85 / 14.707 / 2.0092	75 / 15.685 / 2.0092	195 / 34.943 / 2.0092
12	bumpy_torus	28881	<u>52</u> / 3.746 / 2.0846	76 / 5.632 / 2.0846	121 / 10.242 / 2.0846	146 / 11.066 / 2.0846
13	shark	21656	<u>140</u> / 7.871 / 2.0035	203 / 11.524 / 2.0035	263 / 21.583 / 2.0035	1001 / 59.425 / 4.3223
14	sharp_sphere	15294	<u>28</u> / 1.082 / 2.0532	31 / 1.237 / 2.0532	39 / 1.959 / 2.0532	108 / 4.437 / 2.0532
15	smooth-feature	9237	28 / 0.738 / 2.0000	<u>26</u> / 0.640 / 2.0000	36 / 1.134 / 2.0000	145 / 3.769 / 2.0000
16	three_peaks	3329	43 / 0.406 / 2.7569	43 / 0.328 / 2.7569	41 / 0.427 / 2.7569	72 / 0.607 / 2.7569
17	torso	70858	<u>63</u> / 14.345 / 2.0059	125 / 28.750 / 2.0059	161 / 43.000 / 2.0059	897 / 215.729 / 2.0058
18	trim-star	13075	<u>55</u> / 1.708 / 2.0025	78 / 2.444 / 2.0025	87 / 3.520 / 2.0025	506 / 16.718 / 2.0025
19	twirl	9374	<u>49</u> / 1.112 / 2.0455	49 / 1.113 / 2.0455	60 / 1.831 / 2.0455	250 / 6.086 / 2.0455
20	uu-memento100k	78184	<u>67</u> / 14.840 / 2.0074	104 / 23.349 / 2.0074	147 / 38.768 / 2.0073	318 / 74.155 / 2.0072
21	bunnyBotsch	71141	52 / 12.026 / 2.0059	<u>51</u> / 11.849 / 2.0059	66 / 17.936 / 2.0059	436 / 105.479 / 2.0058
22	vase100K	62128	<u>34</u> / 6.065 / 2.0074	65 / 10.866 / 2.0074	66 / 13.404 / 2.0074	299 / 52.722 / 2.0074
23	vase200K	119557	<u>41</u> / 14.319 / 2.0062	85 / 30.044 / 2.0061	97 / 40.200 / 2.0062	210 / 76.890 / 2.0061
24	venus	1544	27 / 0.096 / 4.3763	<u>26</u> / 0.092 / 4.3763	38 / 0.162 / 4.3763	106 / 0.397 / 4.3763
25	woodenfish	33817	<u>67</u> / 5.955 / 2.0059	124 / 11.006 / 2.0059	169 / 18.826 / 2.0059	349 / 33.932 / 2.0058
26	wrench50K	36552	<u>28</u> / 2.654 / 2.0039	34 / 3.207 / 2.0039	41 / 4.894 / 2.0039	288 / 29.426 / 2.0039
27	camel	60849	<u>145</u> / 23.330 / 2.0056	194 / 30.779 / 2.0056	302 / 55.981 / 2.0056	590 / 98.675 / 2.0055
28	camille_hand100K	73639	<u>67</u> / 13.716 / 2.0041	114 / 23.546 / 2.0041	135 / 33.389 / 2.0041	1001 / 226.722 / 320.9878
29	carter100K	82594	<u>80</u> / 19.306 / 2.0038	145 / 35.674 / 2.0038	194 / 55.596 / 2.0038	1001 / 276.359 / 1224.3219
30	casting_refined	37332	<u>72</u> / 6.903 / 2.0041	206 / 20.023 / 2.0041	249 / 30.187 / 2.0042	287 / 28.923 / 2.0040
31	chair100K	90056	<u>98</u> / 25.196 / 2.0009	213 / 54.831 / 2.0009	302 / 91.385 / 2.0009	1001 / 267.610 / 14.2951
32	chair	90862	<u>113</u> / 29.975 / 2.0009	217 / 56.608 / 2.0009	259 / 78.562 / 2.0009	809 / 217.819 / 2.0008
33	cow2	11836	152 / 4.634 / 2.0089	177 / 5.060 / 2.0089	<u>149</u> / 4.937 / 2.0089	367 / 10.671 / 2.0089
34	cup	8949	<u>27</u> / 0.970 / 2.0141	28 / 0.616 / 2.0141	31 / 0.932 / 2.0141	812 / 21.051 / 2.0141
35	dancer2	22758	<u>53</u> / 3.206 / 2.0063	61 / 3.737 / 2.0063	71 / 5.463 / 2.0063	386 / 24.913 / 2.0063
36	dancer_25k	43435	<u>65</u> / 7.656 / 2.0038	125 / 14.704 / 2.0038	131 / 18.963 / 2.0038	145 / 17.556 / 2.0037
37	david	51072	<u>120</u> / 15.755 / 2.0115	197 / 25.942 / 2.0115	255 / 41.407 / 2.0115	284 / 38.464 / 2.0115
38	deformed_armadillo	84190	<u>176</u> / 42.847 / 2.0136	260 / 63.570 / 2.0136	347 / 99.434 / 2.0136	422 / 108.150 / 2.0136
39	dente	14461	<u>26</u> / 1.056 / 2.0119	31 / 1.115 / 2.0119	57 / 2.757 / 2.0119	68 / 2.577 / 2.0119
40	dilo	43367	<u>62</u> / 7.046 / 2.0258	94 / 10.802 / 2.0258	104 / 14.705 / 2.0258	240 / 28.678 / 2.0257
41	duck	14808	<u>25</u> / 1.036 / 2.0290	28 / 1.100 / 2.0290	30 / 1.489 / 2.0290	64 / 2.496 / 2.0290
42	eight	2166	31 / 0.142 / 2.0221	<u>29</u> / 0.119 / 2.0221	32 / 0.184 / 2.0221	31 / 0.348 / 2.0221
43	elephant	46261	<u>74</u> / 8.772 / 2.0050	116 / 13.945 / 2.0050	173 / 25.674 / 2.0050	191 / 24.924 / 2.0050
44	elk	13468	<u>87</u> / 3.021 / 2.0274	116 / 3.936 / 2.0274	132 / 5.672 / 2.0274	97 / 3.387 / 2.0274
45	eros100K	73348	<u>59</u> / 13.190 / 2.0190	147 / 33.206 / 2.0190	191 / 50.635 / 2.0190	267 / 62.795 / 2.0189
46	face-YO	22632	15 / 0.992 / 2.0307	<u>14</u> / 0.901 / 2.0307	<u>14</u> / 1.148 / 2.0307	105 / 7.341 / 2.0307
47	fandisk	10917	<u>31</u> / 0.994 / 2.0022	39 / 1.058 / 2.0022	42 / 1.522 / 2.0022	52 / 1.465 / 2.0022
48	femur	9707	551 / 12.760 / 2.0526	351 / 8.033 / 2.0526	408 / 12.358 / 2.0526	<u>322</u> / 8.166 / 2.0526
49	fertility_tri	25123	<u>43</u> / 2.949 / 2.0032	77 / 5.286 / 2.0032	81 / 6.932 / 2.0032	152 / 10.676 / 2.0031
50	armadillo	41275	<u>197</u> / 22.583 / 2.0254	230 / 25.993 / 2.0254	379 / 53.750 / 2.0251	666 / 80.058 / 2.0249
51	fig10_nonuniform	42042	21 / 4.223 / 3.3233	<u>20</u> / 2.725 / 3.3233	21 / 3.707 / 3.3233	63 / 9.966 / 3.3233
52	fig10_uniform	42447	<u>12</u> / 1.768 / 3.3110	<u>12</u> / 1.777 / 3.3110	<u>12</u> / 2.093 / 3.3110	39 / 6.273 / 3.3110
53	fig14_exp_dirichlet	148484	21 / 11.609 / 2.7459	<u>20</u> / 11.077 / 2.7459	30 / 19.081 / 2.7459	71 / 44.802 / 2.7459
54	fig15	49862	41 / 5.992 / 3.5124	39 / 5.681 / 3.5124	<u>30</u> / 5.290 / 3.5124	80 / 12.243 / 3.5124
55	fig16	51257	100 / 15.662 / 2.0407	99 / 15.582 / 2.0407	102 / 19.106 / 2.0407	<u>73</u> / 12.233 / 2.0407
56	armchair	60746	<u>40</u> / 6.805 / 2.0109	43 / 7.496 / 2.0109	52 / 10.784 / 2.0109	122 / 20.376 / 2.0109
57	fig3	5691	21 / 0.357 / 3.7189	20 / 0.318 / 3.7189	<u>19</u> / 0.378 / 3.7189	87 / 1.482 / 3.7189

Table 1: Parameterization E_{SD} Result Table

Nr.	Model	Vertices	KP	CM	FP	AKVF
58	fig5	49622	<u>41/ 6.345/</u> 4.2105	46 / 7.440 / 4.2105	45 / 9.053 / 4.2105	334 / 58.133 / 4.2105
59	fig7	151415	<u>39/ 18.192/</u> 2.0837	<u>39/ 18.060/</u> 2.0837	40 / 22.649 / 2.0837	48 / 24.109 / 2.0837
60	fig8	235771	18 / 17.236 / 2.3614	<u>17/ 16.230/</u> 2.3614	18 / 19.701 / 2.3614	48 / 51.724 / 2.3614
61	fig9	95712	<u>19/ 6.453/</u> 2.6171	<u>19/ 6.397/</u> 2.6171	20 / 7.799 / 2.6171	73 / 28.089 / 2.6171
62	fish	16009	<u>55/ 2.285/</u> 2.0038	69 / 2.803 / 2.0038	69 / 3.642 / 2.0039	86 / 3.575 / 2.0038
63	beetle_refined	31362	56 / 5.218 / 2.0164	<u>54/ 4.814/</u> 2.0164	70 / 7.166 / 2.0164	143 / 13.241 / 2.0164
64	foot	13179	<u>34/ 2.000/</u> 3.9141	<u>38/ 1.762/</u> 3.9141	43 / 2.470 / 3.9141	221 / 9.208 / 3.9141
65	gargoyle100K	103285	<u>203/ 59.443/</u> 2.0096	326 / 95.851 / 2.0097	467 / 159.569 / 2.0097	1001 / 303.218 / 239.6509
66	genus3	11640	<u>39/ 1.385/</u> 2.0071	<u>42/ 1.194/</u> 2.0071	<u>39/ 1.430/</u> 2.0071	134 / 3.985 / 2.0071
67	hand_olivier	6849	<u>148/ 3.133/</u> 5.7391	166 / 3.158 / 5.7391	207 / 5.098 / 5.7391	1001 / 20.072 / 5.7401
68	hand	4186	<u>230/ 2.851/</u> 7.2919	301 / 3.188 / 7.2919	347 / 4.821 / 7.2858	1001 / 11.495 / 7.2861
69	helmet	2703	<u>50/ 0.303/</u> 2.0205	53/ 0.285/ 2.0205	97 / 1.062 / 2.0205	1001 / 6.322 / 3427.4809
70	hilbert20k	21730	51 / 2.646 / 2.0000	55 / 2.768 / 2.0000	55 / 3.788 / 2.0000	<u>32/ 1.643/</u> 2.0000
71	bimba100K	73725	<u>61/ 13.398/</u> 2.0146	112 / 24.977 / 2.0146	127 / 33.778 / 2.0146	628 / 156.265 / 2.0146
72	holes3	12036	<u>50/ 1.515/</u> 2.0062	73 / 2.209 / 2.0062	75 / 2.931 / 2.0062	194 / 5.932 / 2.0062
73	homer	14079	<u>59/ 2.118/</u> 2.0142	91 / 3.059 / 2.0142	100 / 4.372 / 2.0142	128 / 4.461 / 2.0142
74	horse	32372	<u>58/ 5.349/</u> 2.0166	75 / 7.118 / 2.0166	122 / 13.245 / 2.0166	278 / 24.441 / 2.0165
75	igeal100k	73221	<u>49/ 10.192/</u> 2.0028	100 / 20.659 / 2.0029	138 / 34.198 / 2.0028	368 / 79.061 / 2.0028
76	isidore_horse	79491	<u>138/ 30.877/</u> 2.0070	150 / 33.704 / 2.0070	206 / 54.716 / 2.0070	311 / 72.264 / 2.0070
77	joint	24566	<u>33/ 2.563/</u> 2.0064	41 / 2.986 / 2.0064	49 / 4.552 / 2.0064	52 / 3.968 / 2.0064
78	julius	65458	<u>16/ 3.361/</u> 2.2183	<u>16/ 3.423/</u> 2.2183	18 / 4.653 / 2.2183	262 / 59.623 / 2.2183
79	kitten100K	73605	<u>61/ 12.381/</u> 2.0074	133 / 27.263 / 2.0074	158 / 39.646 / 2.0074	361 / 77.230 / 2.0074
80	knot100K	69224	<u>103/ 21.913/</u> 2.0294	139 / 29.570 / 2.0294	235 / 59.789 / 2.0292	624 / 144.230 / 2.0291
81	knot1	1356	<u>35/ 0.148/</u> 2.0132	36 / 0.275 / 2.0132	40 / 0.174 / 2.0132	43 / 0.440 / 2.0132
82	laurent_hand	72343	<u>56/ 12.536/</u> 2.0037	120 / 27.263 / 2.0037	164 / 44.460 / 2.0037	485 / 118.339 / 2.0036
83	lion_recon_50K	49717	<u>78/ 9.735/</u> 2.0103	138 / 17.476 / 2.0103	201 / 29.977 / 2.0102	1001 / 130.121 / 310.2355
84	lucy100k	93619	<u>160/ 41.407/</u> 2.0125	274 / 70.980 / 2.0125	417 / 128.149 / 2.0125	669 / 178.914 / 2.0124
85	magalie_hand100K	70976	<u>79/ 16.677/</u> 2.0042	120 / 25.398 / 2.0042	145 / 37.704 / 2.0042	226 / 50.021 / 2.0040
86	mannequin-devil	23450	82 / 5.460 / 3.6870	78/ 5.255/ 3.6869	<u>73/ 5.588/</u> 3.6870	1001 / 73.056 / 3.6870
87	mannequin_mc	65468	33 / 7.233 / 3.5387	<u>32/ 6.995/</u> 3.5387	38 / 9.812 / 3.5387	229 / 54.634 / 3.5387
88	mask	37138	<u>14/ 1.569/</u> 2.0357	<u>14/ 1.491/</u> 2.0357	16 / 1.975 / 2.0357	102 / 11.866 / 2.0357
89	master_cylinder100K	65029	<u>38/ 7.356/</u> 2.0099	61 / 11.930 / 2.0099	91 / 21.976 / 2.0099	251 / 50.690 / 2.0099
90	max-planck	71276	41 / 10.086 / 4.4377	<u>39/ 9.608/</u> 4.4377	<u>39/ 10.762/</u> 4.4377	1001 / 256.524 / 177.3849
91	moai	15759	<u>20/ 0.860/</u> 2.0109	24 / 0.973 / 2.0109	29 / 1.428 / 2.0109	117 / 5.027 / 2.0109
92	block	7612	<u>54/ 0.974/</u> 2.0103	70 / 1.227 / 2.0103	124 / 2.556 / 2.0103	372 / 6.756 / 2.0103
93	mouse	27907	<u>172/ 13.529/</u> 2.0092	199 / 20.333 / 2.0092	231 / 20.688 / 2.0093	663 / 56.251 / 2.0092
94	neptune0	92193	<u>133/ 36.314/</u> 2.0078	195 / 53.510 / 2.0078	313 / 100.399 / 2.0078	758 / 219.862 / 2.0077
95	nicolo_da_uzzano	75396	19 / 4.631 / 2.1355	<u>18/ 4.513/</u> 2.1355	<u>18/ 5.242/</u> 2.1355	413 / 111.990 / 2.1355
96	oni	4234	71 / 0.777 / 4.3551	65/ 0.696/ 4.3551	<u>60/ 0.833/</u> 4.3551	322 / 3.844 / 4.3551
97	pear	15063	<u>28/ 1.057/</u> 2.0181	30 / 1.136 / 2.0181	38 / 1.985 / 2.0181	58 / 2.278 / 2.0181
98	pegaso	36055	<u>120/ 10.978/</u> 2.0124	185 / 16.916 / 2.0124	261 / 31.091 / 2.0124	349 / 34.236 / 2.0124
99	pensatore	69833	<u>39/ 8.042/</u> 2.0093	89 / 18.553 / 2.0093	163 / 40.826 / 2.0092	245 / 53.808 / 2.0091
100	pierrot100k	69508	<u>44/ 8.302/</u> 2.0065	91 / 17.731 / 2.0066	101 / 23.511 / 2.0065	252 / 50.027 / 2.0065
101	botijo	64847	<u>79/ 14.047/</u> 2.0066	160 / 28.573 / 2.0066	235 / 49.977 / 2.0066	1001 / 204.155 / 1112.8140

The triplets in each column denote: number of iterations / total runtime / final energy. For each mesh, the method with the lowest runtime is denoted in bold. The method with the lowest number of iterations is underlined.

Table 2: Parameterization E_{SARAP} Result Table

Nr.	Model	Vertices	KP	CM	FP	AKVF
1	plane-sphere	4951	68 / 1.063 / 0.0514	<u>60</u> / 0.931 / 0.0514	63 / 1.264 / 0.0514	165 / 2.761 / 0.0514
2	pulley100K	71679	<u>178</u> / 40.182 / 0.0074	180 / 40.576 / 0.0074	219 / 58.140 / 0.0074	414 / 98.530 / 0.0074
3	pulley200K	122426	168 / 70.925 / 0.0186	<u>147</u> / 60.842 / 0.0186	209 / 100.546 / 0.0186	470 / 198.053 / 0.0186
4	ramses	63639	<u>185</u> / 38.987 / 0.0133	187 / 39.487 / 0.0133	188 / 45.950 / 0.0133	208 / 42.737 / 0.0133
5	retinal	6493	45 / 0.740 / 0.0117	<u>42</u> / 0.705 / 0.0117	54 / 1.192 / 0.0117	85 / 1.447 / 0.0117
6	bumpy_sphere	8055	44 / 0.989 / 0.0143	<u>43</u> / 0.923 / 0.0143	48 / 1.272 / 0.0143	86 / 1.706 / 0.0143
7	rocker_arm	16862	<u>65</u> / 2.753 / 0.0048	65 / 2.782 / 0.0048	78 / 4.291 / 0.0048	139 / 6.105 / 0.0048
8	santa	108299	388 / 124.003 / 0.0049	382 / 121.111 / 0.0049	339 / 123.541 / 0.0049	<u>314</u> / 98.113 / 0.0049
9	screwdriver	37610	142 / 17.266 / 0.0041	<u>126</u> / 14.234 / 0.0041	162 / 21.955 / 0.0041	204 / 23.228 / 0.0041
10	sculpt	10370	<u>51</u> / 1.908 / 0.0036	52 / 1.338 / 0.0036	75 / 2.528 / 0.0036	120 / 3.223 / 0.0036
11	sediapatch1_100K	64172	119 / 20.955 / 0.0052	<u>118</u> / 20.811 / 0.0052	119 / 25.340 / 0.0052	300 / 55.600 / 0.0052
12	bumpy_torus	28881	<u>141</u> / 11.706 / 0.0518	146 / 13.221 / 0.0518	205 / 18.465 / 0.0518	195 / 15.840 / 0.0518
13	shark	21656	441 / 25.646 / 0.0020	<u>435</u> / 25.434 / 0.0020	525 / 38.231 / 0.0020	1000 / 59.800 / 71.4360
14	sharp_sphere	15294	56 / 2.338 / 0.0326	58 / 2.419 / 0.0326	<u>50</u> / 2.679 / 0.0326	156 / 6.479 / 0.0326
15	smooth-feature	9237	59 / 1.473 / 0.0000	59 / 1.492 / 0.0000	<u>48</u> / 1.541 / 0.0000	165 / 4.294 / 0.0000
16	three_peaks	3329	77 / 0.802 / 0.6098	78 / 0.732 / 0.6098	<u>62</u> / 0.716 / 0.6090	142 / 1.376 / 0.6104
17	torso	70858	315 / 74.859 / 0.0033	<u>309</u> / 73.299 / 0.0033	358 / 99.071 / 0.0033	856 / 206.158 / 0.0033
18	trim-star	13075	115 / 3.847 / 0.0014	<u>110</u> / 7.116 / 0.0014	131 / 13.073 / 0.0014	560 / 37.606 / 0.0014
19	twirl	9374	70 / 1.636 / 0.0303	<u>67</u> / 1.567 / 0.0303	82 / 2.488 / 0.0304	268 / 6.772 / 0.0303
20	uu-memento100k	78184	<u>275</u> / 64.416 / 0.0041	317 / 74.935 / 0.0041	346 / 94.646 / 0.0041	379 / 88.751 / 0.0041
21	bunnyBotsch	71141	172 / 41.029 / 0.0032	185 / 44.189 / 0.0032	<u>136</u> / 38.130 / 0.0032	369 / 88.983 / 0.0032
22	vase100K	62128	164 / 28.245 / 0.0041	137 / 23.409 / 0.0041	<u>135</u> / 27.935 / 0.0041	311 / 55.346 / 0.0041
23	vase200K	119557	<u>134</u> / 47.915 / 0.0034	147 / 52.837 / 0.0034	166 / 70.770 / 0.0044	237 / 88.286 / 0.0034
24	venus	1544	<u>101</u> / 0.520 / 2.2239	106 / 0.620 / 2.2240	106 / 0.691 / 2.2228	354 / 2.185 / 2.2465
25	woodenfish	33817	219 / 19.609 / 0.0033	<u>195</u> / 17.572 / 0.0033	301 / 34.113 / 0.0033	377 / 34.627 / 0.0033
26	wrench50K	36552	135 / 13.435 / 0.0022	<u>131</u> / 12.783 / 0.0022	166 / 20.444 / 0.0022	242 / 24.892 / 0.0022
27	camel	60849	302 / 48.423 / 0.0032	<u>294</u> / 47.638 / 0.0032	537 / 102.113 / 0.0032	535 / 87.581 / 0.0031
28	camille_hand100K	73639	<u>198</u> / 41.816 / 0.0023	217 / 46.181 / 0.0023	316 / 79.192 / 0.0023	968 / 217.158 / 0.0023
29	carter100K	82594	435 / 114.635 / 0.0020	<u>341</u> / 88.662 / 0.0021	541 / 162.960 / 0.0021	1000 / 277.995 / 2791.2637
30	casting_refined	37332	516 / 50.649 / 0.0022	457 / 44.508 / 0.0022	476 / 58.192 / 0.0022	<u>241</u> / 19.085 / 0.0022
31	chair100K	90056	308 / 79.870 / 0.0005	<u>304</u> / 78.928 / 0.0005	506 / 154.931 / 0.0005	1000 / 269.795 / 39.2517
32	chair	90862	383 / 100.022 / 0.0004	<u>373</u> / 97.414 / 0.0004	499 / 152.637 / 0.0005	863 / 231.915 / 0.0004
33	cow2	11836	176 / 5.102 / 0.0051	<u>162</u> / 4.652 / 0.0052	210 / 7.024 / 0.0051	436 / 12.865 / 0.0051
34	cup	8949	<u>39</u> / 0.885 / 0.0078	<u>39</u> / 0.896 / 0.0078	41 / 1.243 / 0.0078	1000 / 26.502 / 1179.1078
35	dancer2	22758	118 / 7.448 / 0.0035	<u>113</u> / 7.052 / 0.0035	157 / 12.445 / 0.0035	255 / 16.266 / 0.0035
36	dancer_25k	43435	209 / 24.949 / 0.0021	229 / 27.424 / 0.0021	267 / 39.336 / 0.0021	<u>157</u> / 19.085 / 0.0021
37	david	51072	349 / 47.093 / 0.0066	345 / 46.805 / 0.0066	475 / 80.454 / 0.0066	<u>338</u> / 46.050 / 0.0066
38	deformed_armadillo	84190	367 / 93.517 / 0.0080	<u>343</u> / 90.431 / 0.0080	618 / 182.597 / 0.0080	358 / 91.025 / 0.0080
39	dente	14461	56 / 2.180 / 0.0067	<u>48</u> / 1.842 / 0.0067	92 / 4.587 / 0.0068	86 / 3.332 / 0.0067
40	dilo	43367	334 / 63.131 / 0.0148	338 / 47.076 / 0.0148	<u>325</u> / 49.744 / 0.0148	359 / 43.048 / 0.0148
41	duck	14808	<u>53</u> / 2.106 / 0.0173	58 / 2.295 / 0.0173	127 / 6.724 / 0.0173	88 / 3.529 / 0.0173
42	eight	2166	<u>28</u> / 0.155 / 0.0131	<u>28</u> / 0.125 / 0.0131	35 / 0.204 / 0.0131	39 / 0.184 / 0.0131
43	elephant	46261	<u>189</u> / 23.065 / 0.0027	194 / 23.592 / 0.0027	367 / 55.122 / 0.0027	222 / 27.247 / 0.0027
44	elk	13468	210 / 7.614 / 0.0167	313 / 11.890 / 0.0167	396 / 18.885 / 0.0167	<u>110</u> / 3.962 / 0.0166
45	eros100K	73348	<u>246</u> / 57.176 / 0.0115	262 / 62.137 / 0.0115	345 / 92.939 / 0.0115	313 / 74.213 / 0.0115
46	face-YO	22632	61 / 4.647 / 0.0177	<u>49</u> / 3.579 / 0.0177	60 / 5.530 / 0.0177	216 / 16.593 / 0.0177
47	fandisk	10917	<u>49</u> / 1.574 / 0.0012	<u>49</u> / 1.443 / 0.0012	78 / 3.043 / 0.0012	66 / 2.055 / 0.0012
48	femur	9707	251 / 6.359 / 0.0408	<u>227</u> / 5.483 / 0.0408	320 / 10.092 / 0.0408	293 / 7.406 / 0.0406
49	fertility_tri	25123	<u>144</u> / 10.061 / 0.0017	148 / 10.347 / 0.0017	169 / 14.459 / 0.0017	154 / 11.004 / 0.0017
50	armadillo	41275	1000 / 124.670 / 0.0145	1000 / 125.345 / 0.0145	1000 / 152.754 / 0.0145	<u>675</u> / 80.664 / 0.0143
51	fig10_nonuniform	42042	190 / 41.653 / 1.2134	<u>186</u> / 40.452 / 1.2134	244 / 43.186 / 1.2135	646 / 102.761 / 1.2205
52	fig10_uniform	42447	<u>386</u> / 74.823 / 1.2006	395 / 76.741 / 1.2006	429 / 97.987 / 1.2006	1000 / 207.103 / 1.2068
53	fig14_exp_dirichlet	148484	<u>90</u> / 64.064 / 0.5829	110 / 81.981 / 0.5829	112 / 91.745 / 0.5830	526 / 452.361 / 0.5868
54	fig15	49862	172 / 30.129 / 1.3364	<u>165</u> / 29.367 / 1.3384	228 / 48.785 / 1.3367	689 / 137.046 / 1.3696
55	fig16	51257	235 / 43.898 / 0.0241	225 / 40.196 / 0.0241	239 / 50.760 / 0.0241	<u>64</u> / 11.219 / 0.0240
56	armchair	60746	112 / 19.425 / 0.0062	<u>108</u> / 19.170 / 0.0062	121 / 25.433 / 0.0062	181 / 31.560 / 0.0062
57	fig3	5691	<u>175</u> / 3.394 / 1.5385	182 / 3.539 / 1.5383	244 / 6.014 / 1.5385	737 / 15.574 / 1.5486

Table 2: Parameterization E_{SARAP} Result Table

Nr.	Model	Vertices	KP	CM	FP	AKVF
58	fig5	49622	<u>143/ 26.927/</u> 2.1602	156 / 29.895 / 2.1601	158 / 35.089 / 2.1623	464 / 95.720 / 2.1802
59	fig7	151415	270 / 158.998 / 0.0543	312 / 189.249 / 0.0543	294 / 201.281 / 0.0543	<u>246/ 155.212/</u> 0.0543
60	fig8	235771	190 / 263.018 / 0.2496	<u>166/ 224.116/</u> 0.2496	188 / 278.860 / 0.2496	884 / 1391.041 / 0.2508
61	fig9	95712	<u>138/ 63.845/</u> 0.5469	157 / 74.405 / 0.5469	162 / 84.377 / 0.5469	568 / 294.694 / 0.5496
62	fish	16009	160 / 6.647 / 0.0022	194 / 8.203 / 0.0022	188 / 10.116 / 0.0022	<u>99/ 4.093/</u> 0.0022
63	beetle_refined	31362	<u>51/ 4.633/</u> 0.0104	<u>51/ 4.531/</u> 0.0104	71 / 7.367 / 0.0104	341 / 31.864 / 0.0104
64	foot	13179	<u>152/ 7.411/</u> 1.8369	158 / 7.785 / 1.8369	162 / 9.461 / 1.8371	1000 / 52.263 / 1.8567
65	gargoyle100K	103285	746 / 235.451 / 0.0054	<u>606/ 186.152/</u> 0.0054	1000 / 354.697 / 0.0054	1000 / 304.616 / 430.6324
66	genus3	11640	<u>73/ 2.165/</u> 0.0040	104 / 3.120 / 0.0040	74 / 2.888 / 0.0040	140 / 4.192 / 0.0040
67	hand_olivier	6849	188 / 4.342 / 3.9759	<u>161/ 3.588/</u> 3.9757	296 / 8.614 / 3.9711	1000 / 22.651 / 4.0438
68	hand	4186	<u>152/ 2.008/</u> 6.0976	160 / 2.082 / 6.0980	275 / 4.467 / 6.1138	1000 / 12.790 / 6.2550
69	helmet	2703	<u>61/ 0.362/</u> 0.0125	<u>61/ 0.347/</u> 0.0125	68 / 0.461 / 0.0125	1000 / 6.416 / 4967.9419
70	hilbert20k	21730	51 / 2.596 / 0.0000	51 / 2.579 / 0.0000	52 / 3.515 / 0.0000	<u>33/ 1.769/</u> 0.0000
71	bimba100K	73725	<u>190/ 43.976/</u> 0.0085	199 / 46.051 / 0.0085	296 / 82.364 / 0.0085	577 / 140.943 / 0.0085
72	holes3	12036	<u>101/ 3.167/</u> 0.0034	106/ 3.162 / 0.0034	120 / 4.662 / 0.0034	333 / 10.357 / 0.0034
73	homer	14079	161 / 5.572 / 0.0081	162 / 5.659 / 0.0081	228 / 10.348 / 0.0081	<u>154/ 5.474/</u> 0.0080
74	horse	32372	170 / 15.305 / 0.0094	164 / 14.651 / 0.0094	<u>127/ 13.952/</u> 0.0224	308 / 27.367 / 0.0094
75	igea100k	73221	<u>203/ 42.939/</u> 0.0015	209 / 45.433 / 0.0015	298 / 78.169 / 0.0015	446 / 100.221 / 0.0015
76	isidore_horse	79491	285 / 66.808 / 0.0040	<u>279/ 65.111/</u> 0.0040	382 / 102.963 / 0.0040	335 / 79.245 / 0.0040
77	joint	24566	64 / 5.328 / 0.0036	<u>54/ 4.053/</u> 0.0036	66 / 6.099 / 0.0036	60 / 4.578 / 0.0036
78	julius	65458	90 / 22.610 / 0.1471	<u>82/ 20.599/</u> 0.1471	87 / 25.035 / 0.1471	426 / 107.120 / 0.1473
79	kitten100K	73605	241 / 52.386 / 0.0043	<u>215/ 45.932/</u> 0.0043	293 / 75.942 / 0.0042	364 / 78.714 / 0.0042
80	knot100K	69224	711 / 168.914 / 0.0167	899 / 220.997 / 0.0167	930 / 262.394 / 0.0167	<u>634/ 143.187/</u> 0.0166
81	knot1	1356	<u>34/ 0.124/</u> 0.0073	<u>34/ 0.107/</u> 0.0073	39 / 0.150 / 0.0073	49 / 0.159 / 0.0073
82	laurent_hand	72343	<u>226/ 53.711/</u> 0.0020	227 / 54.576 / 0.0020	299 / 81.707 / 0.0020	453 / 108.443 / 0.0020
83	lion_recon_50K	49717	<u>449/ 59.171/</u> 0.0057	456 / 59.937 / 0.0057	626 / 94.834 / 0.0057	1000 / 126.961 / 572.1591
84	lucy100k	93619	<u>655/ 180.365/</u> 0.0071	761 / 212.832 / 0.0071	1000 / 320.473 / 0.0071	795 / 215.921 / 0.0071
85	magalie_hand100K	70976	358 / 78.262 / 0.0022	366 / 80.102 / 0.0022	442 / 116.654 / 0.0022	<u>228/ 50.429/</u> 0.0022
86	mannequin-devil	23450	209 / 16.759 / 1.5777	<u>189/ 14.950/</u> 1.5777	211 / 18.626 / 1.5782	790 / 67.716 / 1.5883
87	mannequin_mc	65468	410 / 111.344 / 1.3789	<u>289/ 77.101/</u> 1.3789	303 / 91.511 / 1.3789	1000 / 288.080 / 1.3951
88	mask	37138	45 / 5.486 / 0.0207	<u>42/ 5.076/</u> 0.0207	51 / 7.341 / 0.0207	185 / 22.614 / 0.0207
89	master_cylinder100K	65029	100 / 20.118 / 0.0055	<u>99/ 19.536/</u> 0.0055	141 / 33.400 / 0.0055	232 / 48.420 / 0.0055
90	max-planck	71276	<u>352/ 105.689/</u> 2.4722	366/ 104.927/ 2.4722	357 / 118.726 / 2.4722	1000 / 255.821 / 292.0111
91	moai	15759	<u>38/ 1.588/</u> 0.0062	<u>38/ 1.572/</u> 0.0062	58 / 2.849 / 0.0062	127 / 5.381 / 0.0062
92	block	7612	<u>195/ 3.460/</u> 0.0060	196 / 3.594 / 0.0060	327 / 7.081 / 0.0060	414 / 7.424 / 0.0060
93	mouse	27907	<u>301/ 23.534/</u> 0.0057	314 / 24.522 / 0.0057	379 / 35.582 / 0.0058	732 / 57.526 / 0.0057
94	neptune0	92193	<u>433/ 127.193/</u> 0.0043	486 / 142.288 / 0.0043	746 / 247.232 / 0.0043	957 / 280.732 / 0.0043
95	nicolo_da_uzzano	75396	85 / 26.067 / 0.0867	91 / 28.159 / 0.0867	<u>75/ 25.727/</u> 0.0867	599 / 178.516 / 0.0868
96	oni	4234	106 / 1.369 / 2.4300	<u>100/ 1.266/</u> 2.4298	135 / 2.191 / 2.4301	315 / 4.242 / 2.4448
97	pear	15063	<u>44/ 1.699/</u> 0.0105	50 / 1.945 / 0.0105	50 / 2.567 / 0.0105	86 / 3.407 / 0.0105
98	pegaso	36055	308 / 28.954 / 0.0073	<u>277/ 26.136/</u> 0.0073	499 / 58.051 / 0.0073	371 / 35.416 / 0.0073
99	pensatore	69833	416 / 91.336 / 0.0050	423 / 92.085 / 0.0050	472 / 121.055 / 0.0050	<u>300/ 67.842/</u> 0.0050
100	pierrot100k	69508	<u>243/ 56.902/</u> 0.0036	276/ 56.352/ 0.0036	293 / 71.878 / 0.0036	352 / 71.004 / 0.0035
101	botijo	64847	<u>289/ 53.108/</u> 0.0037	335 / 61.491 / 0.0037	534 / 116.618 / 0.0037	1000 / 204.140 / 2218.5255

The triplets in each column denote: number of iterations / total runtime / final energy. For each mesh, the method with the lowest runtime is denoted in bold. The method with the lowest number of iterations is underlined.

Table 3: Parameterization E_{BCONF} Result Table

Nr.	Model	Vertices	KP	FP	AKVF
1	plane-sphere	4951	<u>7</u> / 0.092 / 0.2141	<u>7</u> / 0.123 / 0.2141	67 / 0.941 / 0.2141
2	pulley100K	71679	<u>93</u> / 21.211 / 0.2020	106 / 28.568 / 0.2020	515 / 121.037 / 0.2020
3	pulley200K	122426	<u>82</u> / 33.642 / 0.2048	101 / 47.204 / 0.2048	633 / 264.173 / 0.2048
4	rams	63639	<u>45</u> / 8.447 / 0.2035	46 / 10.098 / 0.2035	409 / 81.007 / 0.2034
5	retinal	6493	<u>26</u> / 0.412 / 0.2033	34 / 0.672 / 0.2033	100 / 1.651 / 0.2033
6	bumpy_sphere	8055	20 / 0.445 / 0.2039	<u>13</u> / 0.312 / 0.2039	93 / 1.932 / 0.2039
7	rocker_arm	16862	<u>46</u> / 1.944 / 0.2014	56 / 3.054 / 0.2014	477 / 21.075 / 0.2013
8	santa	108299	<u>99</u> / 29.751 / 0.2013	135 / 47.734 / 0.2013	465 / 144.214 / 0.2013
9	screwdriver	37610	<u>41</u> / 4.306 / 0.2011	52 / 6.822 / 0.2011	239 / 26.936 / 0.2011
10	sculpt	10370	41 / 1.007 / 0.2011	<u>36</u> / 1.223 / 0.2011	161 / 4.214 / 0.2010
11	sediapatch1_100K	64172	<u>70</u> / 12.262 / 0.2014	82 / 17.090 / 0.2014	1001 / 221.105 / 69.1522
12	bumpy_torus	28881	<u>76</u> / 5.612 / 0.2132	83 / 7.073 / 0.2132	343 / 26.638 / 0.2132
13	shark	21656	152 / 8.661 / 0.2006	<u>148</u> / 10.651 / 0.2006	1001 / 59.845 / 48.5170
14	sharp_sphere	15294	266 / 10.662 / 0.2081	<u>53</u> / 2.761 / 0.2081	184 / 7.533 / 0.2081
15	smooth-feature	9237	<u>42</u> / 1.054 / 0.2000	46 / 1.445 / 0.2000	198 / 5.110 / 0.2000
16	three_peaks	3329	29 / 0.256 / 0.3071	<u>27</u> / 0.320 / 0.3071	117 / 0.957 / 0.3071
17	torso	70858	137 / 32.134 / 0.2009	<u>125</u> / 33.944 / 0.2009	1001 / 238.677 / 2.6106
18	trim-star	13075	<u>73</u> / 5.120 / 0.2004	90 / 6.440 / 0.2005	747 / 26.016 / 0.2004
19	twirl	9374	242 / 5.739 / 0.2072	<u>33</u> / 1.006 / 254.8504	898 / 21.764 / 0.2072
20	uu-memento100k	78184	<u>107</u> / 24.012 / 0.2011	150 / 39.523 / 0.2011	1001 / 246.500 / 0.7863
21	bunnyBotsch	71141	<u>65</u> / 15.214 / 0.2009	73 / 19.787 / 0.2009	309 / 74.333 / 0.2009
22	vase100K	62128	84 / 14.091 / 0.2011	81 / 16.447 / 0.2011	559 / 99.910 / 0.2011
23	vase200K	119557	<u>76</u> / 27.082 / 0.2009	110 / 44.823 / 0.2009	327 / 119.755 / 0.2009
24	venus	1544	<u>25</u> / 0.098 / 0.5743	29 / 0.165 / 0.5743	333 / 1.163 / 0.5743
25	woodenfish	33817	<u>107</u> / 9.514 / 0.2009	134 / 14.966 / 0.2010	1001 / 102.935 / 4.0294
26	wrench50K	36552	<u>44</u> / 5.181 / 0.2006	54 / 6.474 / 0.2006	741 / 78.769 / 0.2006
27	camel	60849	<u>231</u> / 36.279 / 0.2009	298 / 56.730 / 0.2009	832 / 132.736 / 0.2008
28	camille_hand100K	73639	<u>100</u> / 20.843 / 0.2007	109 / 26.785 / 0.2007	1001 / 222.648 / 2.6106
29	carter100K	82594	<u>112</u> / 27.682 / 0.2006	178 / 50.827 / 0.2006	1001 / 279.136 / 647.3774
30	casting_refined	37332	<u>123</u> / 12.248 / 0.2007	215 / 25.869 / 0.2007	348 / 34.422 / 0.2006
31	chair100K	90056	<u>156</u> / 40.333 / 0.2002	364 / 109.151 / 0.2002	1001 / 278.272 / 261.9849
32	chair	90862	<u>188</u> / 48.913 / 0.2002	314 / 94.769 / 0.2002	1001 / 268.990 / 15.5030
33	cow2	11836	<u>127</u> / 3.703 / 0.2015	139 / 4.522 / 0.2015	261 / 7.502 / 0.2015
34	cup	8949	24 / 0.543 / 0.2020	<u>22</u> / 0.626 / 0.2020	1001 / 26.192 / 266.4211
35	dancer2	22758	<u>70</u> / 4.325 / 0.2010	72 / 5.608 / 0.2010	302 / 19.273 / 0.2010
36	dancer_25k	43435	<u>83</u> / 9.817 / 0.2006	96 / 13.664 / 0.2006	318 / 38.478 / 0.2006
37	david	51072	<u>137</u> / 18.086 / 0.2018	235 / 38.008 / 0.2018	576 / 77.880 / 0.2018
38	deformed_armadillo	84190	<u>157</u> / 38.911 / 0.2020	364 / 103.431 / 0.2020	1001 / 256.377 / 0.2020
39	dente	14461	<u>26</u> / 0.970 / 0.2018	28 / 1.329 / 0.2018	115 / 4.365 / 0.2018
40	dilo	43367	<u>79</u> / 9.197 / 0.2040	88 / 12.555 / 0.2040	907 / 110.690 / 0.2039
41	duck	14808	<u>38</u> / 1.443 / 0.2045	44 / 2.179 / 0.2045	103 / 4.082 / 0.2045
42	eight	2166	30 / 0.147 / 0.2035	<u>28</u> / 0.156 / 0.2035	54 / 0.252 / 0.2035
43	elephant	46261	<u>109</u> / 13.189 / 0.2009	160 / 23.563 / 0.2008	778 / 97.534 / 0.2008
44	elk	13468	<u>85</u> / 2.844 / 0.2045	97 / 4.187 / 0.2045	290 / 10.234 / 0.2044
45	eros100K	73348	<u>136</u> / 31.094 / 0.2029	187 / 49.181 / 0.2029	729 / 168.711 / 0.2029
46	face-YO	22632	9 / 0.587 / 0.2046	<u>8</u> / 0.606 / 0.2046	130 / 9.050 / 0.2046
47	fandisk	10917	<u>39</u> / 1.322 / 0.2003	40 / 1.795 / 0.2003	104 / 3.877 / 0.2003
48	femur	9707	<u>201</u> / 4.606 / 0.2080	292 / 8.805 / 0.2080	545 / 13.062 / 0.2080
49	fertility_tri	25123	<u>69</u> / 4.977 / 0.2005	91 / 10.457 / 0.2005	219 / 22.287 / 0.2005
50	armadillo	41275	<u>132</u> / 15.312 / 0.2042	174 / 24.774 / 0.2043	1001 / 118.933 / 0.2039
51	fig10_nonuniform	42042	<u>14</u> / 1.672 / 0.4568	15 / 2.207 / 0.4568	290 / 41.154 / 0.4568
52	fig10_uniform	42447	8 / 1.156 / 0.4530	<u>7</u> / 1.146 / 0.4530	155 / 24.803 / 0.4530

Table 3: Parameterization E_{BCONF} Result Table

Nr.	Model	Vertices	KP	FP	AKVF
53	fig14_exp_dirichlet	148484	<u>17/ 9.512/</u> 0.3096	19 / 11.713 / 0.3096	140 / 83.756 / 0.3096
54	fig15	49862	<u>21/ 3.021/</u> 0.4484	25 / 4.414 / 0.4484	408 / 62.933 / 0.4484
55	fig16	51257	<u>27/ 4.144/</u> 0.2062	33 / 6.045 / 0.2062	90 / 14.215 / 0.2061
56	armchair	60746	108 / 17.696 / 0.2016	<u>61/ 12.138/</u> 0.2016	418 / 70.206 / 0.2016
57	fig3	5691	17/ 0.254/ 0.4927	<u>16/</u> 0.322/ 0.4927	252 / 4.144 / 0.4927
58	fig5	49622	<u>23/ 3.579/</u> 0.5544	29 / 5.475 / 0.5544	1001 / 174.763 / 0.5544
59	fig7	151415	29/ 13.673/ 0.2134	<u>26/</u> 14.757/ 0.2134	78 / 39.596 / 0.2134
60	fig8	235771	<u>11/ 10.115/</u> 0.2545	<u>11/</u> 11.453/ 0.2545	86 / 90.408 / 0.2545
61	fig9	95712	<u>14/ 4.720/</u> 0.3160	16 / 6.161 / 0.3160	615 / 252.037 / 0.3160
62	fish	16009	141 / 5.641 / 0.2006	<u>63/ 3.243/</u> 0.2007	123 / 5.035 / 0.2006
63	beetle_refined	31362	<u>64/ 5.986/</u> 0.2024	75 / 7.562 / 0.2024	199 / 17.990 / 0.2027
64	foot	13179	<u>35/ 1.418/</u> 0.5111	42 / 2.180 / 0.5111	636 / 27.557 / 0.5111
65	gargoyle100K	103285	<u>217/ 64.835/</u> 0.2016	538 / 185.231 / 0.2016	1001 / 323.251 / 50.6231
66	genus3	11640	84/ 2.390/ 0.2010	<u>66/</u> 2.399/ 0.2011	142 / 4.175 / 0.2010
67	hand_olivier	6849	<u>120/ 2.327/</u> 0.6612	179 / 4.370 / 0.6612	1001 / 20.608 / 0.6615
68	hand	4186	<u>193/ 2.140/</u> 0.8382	196 / 2.817 / 0.8382	1001 / 16.403 / 0.8397
69	helmet	2703	<u>60/ 0.379/</u> 0.2035	70 / 0.495 / 0.2035	1001 / 6.362 / 2043.5998
70	hilbert20k	21730	<u>20/ 1.026/</u> 0.2000	21 / 1.422 / 0.2000	52 / 2.636 / 0.2000
71	bimba100K	73725	<u>103/ 23.047/</u> 0.2021	117 / 30.919 / 0.2021	786 / 195.543 / 0.2021
72	holes3	12036	<u>78/ 2.339/</u> 0.2009	79 / 3.020 / 0.2010	1001 / 35.096 / 4.2608
73	homer	14079	<u>102/ 3.499/</u> 0.2024	112 / 4.914 / 0.2024	199 / 6.961 / 0.2023
74	horse	32372	<u>114/ 9.867/</u> 0.2025	127 / 13.747 / 0.2025	1001 / 88.247 / 0.3421
75	igea100k	73221	251 / 52.561 / 0.2004	<u>158/ 39.398/</u> 0.2004	844 / 181.678 / 0.2004
76	isidore_horse	79491	282/ 63.787/ 0.2011	<u>261/</u> 68.838/ 0.2011	552 / 127.945 / 0.2011
77	joint	24566	36/ 2.866/ 0.2009	<u>33/</u> 3.008/ 0.2009	92 / 7.052 / 0.2009
78	julius	65458	11/ 2.225/ 0.2358	<u>10/</u> 2.329/ 0.2358	355 / 81.765 / 0.2358
79	kitten100K	73605	<u>122/ 25.188/</u> 0.2011	125 / 31.751 / 0.2011	937 / 203.410 / 0.2011
80	knot100K	69224	142/ 31.090/ 0.2046	<u>140/</u> 35.575/ 0.2046	1001 / 254.062 / 143.8518
81	knot1	1356	32 / 0.145 / 0.2026	<u>31/ 0.107/</u> 0.2026	81 / 0.233 / 0.2026
82	laurent_hand	72343	<u>111/ 25.033/</u> 0.2006	155 / 42.655 / 0.2006	590 / 139.167 / 0.2005
83	lion_recon_50K	49717	<u>108/ 13.669/</u> 0.2016	128 / 18.339 / 0.2016	1001 / 127.370 / 125.2828
84	lucy100k	93619	<u>258/ 66.968/</u> 0.2020	901 / 278.060 / 0.2020	1001 / 270.261 / 28.4152
85	magalie_hand100K	70976	<u>140/ 29.753/</u> 0.2007	149 / 38.257 / 0.2007	478 / 107.239 / 0.2006
86	mannequin-devil	23450	67 / 4.580 / 0.5034	<u>52/ 3.965/</u> 0.5034	1001 / 71.454 / 0.5034
87	mannequin_mc	65468	<u>27/ 6.068/</u> 0.4855	<u>27/</u> 7.041/ 0.4855	457 / 111.676 / 0.4855
88	mask	37138	<u>10/ 1.033/</u> 0.2054	<u>10/</u> 1.209/ 0.2054	124 / 14.359 / 0.2054
89	master_cylinder100K	65029	<u>95/ 18.611/</u> 0.2014	100 / 23.331 / 0.2014	1001 / 226.224 / 9.5069
90	max-planck	71276	47/ 11.263/ 0.6530	<u>45/</u> 12.528/ 0.6530	1001 / 255.279 / 49.1467
91	moai	15759	<u>19/ 0.785/</u> 0.2017	22 / 1.087 / 0.2017	139 / 6.375 / 0.2017
92	block	7612	<u>86/ 1.529/</u> 0.2017	126 / 2.584 / 0.2017	375 / 6.588 / 0.2017
93	mouse	27907	<u>179/ 13.439/</u> 0.2014	233 / 21.272 / 0.2014	547 / 45.207 / 0.2014
94	neptune0	92193	206/ 56.498/ 0.2013	<u>181/</u> 58.319/ 1267.0937	1001 / 281.969 / 4.2963
95	nicolo_da_uzzano	75396	18/ 4.453/ 0.2215	<u>17/</u> 4.733/ 0.2215	275 / 74.553 / 18.1400
96	oni	4234	52/ 0.561/ 0.6166	<u>45/</u> 0.634/ 0.6166	590 / 6.710 / 0.6166
97	pear	15063	<u>44/ 1.686/</u> 0.2028	46 / 2.264 / 0.2028	130 / 5.139 / 0.2028
98	pegaso	36055	<u>126/ 11.626/</u> 0.2021	199 / 22.617 / 0.2021	728 / 68.562 / 0.2021
99	pensatore	69833	<u>95/ 20.039/</u> 0.2014	101 / 24.820 / 0.2014	595 / 129.322 / 0.2014
100	pierrot100k	69508	147/ 28.553/ 0.2010	<u>138/</u> 32.209/ 0.2010	822 / 173.234 / 0.2010
101	botijo	64847	<u>114/ 20.588/</u> 0.2010	137 / 29.453 / 0.2010	1001 / 205.189 / 286.9973

The triplets in each column denote: number of iterations / total runtime / final energy. For each mesh, the method with the lowest runtime is denoted in bold. The method with the lowest number of iterations is underlined.

Table 4: Parameterization E_{BARAP} Result Table

Nr.	Model	Vertices	KP	FP	AKVF
1	plane-sphere	4951	<u>7</u> / 0.098 / 0.2491	8 / 0.137 / 0.2491	63 / 0.896 / 0.2491
2	pulley100K	71679	<u>118</u> / 26.797 / 0.2074	119 / 31.419 / 0.2074	381 / 89.212 / 0.2073
3	pulley200K	122426	<u>112</u> / 46.128 / 0.2177	<u>110</u> / 51.169 / 0.2177	505 / 212.083 / 0.2177
4	rams	63639	59 / 11.004 / 0.2120	<u>57</u> / 12.711 / 0.2120	216 / 42.673 / 0.2120
5	retinal	6493	<u>37</u> / 0.579 / 0.2112	41 / 0.844 / 0.2112	73 / 1.163 / 0.2112
6	bumpy_sphere	8055	<u>19</u> / 0.424 / 0.2133	<u>18</u> / 0.436 / 0.2133	74 / 1.468 / 0.2133
7	rocker_arm	16862	63 / 2.662 / 0.2047	<u>59</u> / 3.192 / 0.2047	143 / 6.295 / 0.2047
8	santa	108299	212 / 64.222 / 0.2049	<u>150</u> / 53.642 / 0.2049	370 / 114.378 / 0.2048
9	screwdriver	37610	<u>52</u> / 5.541 / 0.2043	<u>52</u> / 6.948 / 0.2043	229 / 25.749 / 0.2042
10	sculpt	10370	71 / 1.785 / 0.2037	<u>67</u> / 2.210 / 0.2037	147 / 3.873 / 0.2036
11	sediapatch1_100K	64172	<u>83</u> / 14.371 / 0.2051	96 / 20.746 / 0.2051	424 / 77.346 / 0.2051
12	bumpy_torus	28881	96 / 7.179 / 0.2451	89 / 7.566 / 0.2451	196 / 14.756 / 0.2451
13	shark	21656	265 / 18.076 / 0.2019	<u>198</u> / 14.151 / 0.2019	1001 / 59.287 / 13.7703
14	sharp_sphere	15294	394 / 15.824 / 0.2308	<u>68</u> / 3.496 / 0.2308	158 / 6.618 / 0.2308
15	smooth-feature	9237	66 / 1.638 / 0.2000	<u>63</u> / 2.024 / 0.2000	171 / 4.452 / 0.2000
16	three_peaks	3329	38 / 0.319 / 0.4654	<u>34</u> / 0.357 / 0.4654	131 / 1.060 / 0.4654
17	torso	70858	166 / 38.914 / 0.2032	<u>144</u> / 38.666 / 0.2032	808 / 193.401 / 0.2032
18	trim-star	13075	107 / 3.332 / 0.2013	<u>106</u> / 4.292 / 0.2013	619 / 20.504 / 0.2013
19	twirl	9374	<u>221</u> / 5.396 / 0.2242	312 / 9.598 / 0.2242	421 / 10.256 / 0.2242
20	uu-memento100k	78184	<u>148</u> / 33.370 / 0.2042	<u>148</u> / 39.235 / 0.2042	393 / 91.336 / 0.2041
21	bunnyBotsch	71141	98 / 22.932 / 0.2033	<u>91</u> / 25.050 / 0.2033	233 / 55.516 / 0.2032
22	vase100K	62128	92 / 15.543 / 0.2042	<u>90</u> / 18.438 / 0.2042	541 / 96.524 / 0.2042
23	vase200K	119557	104 / 37.382 / 0.2035	<u>103</u> / 42.240 / 0.2035	285 / 104.237 / 0.2035
24	venus	1544	<u>83</u> / 0.390 / 1.0672	118 / 0.633 / 1.0672	454 / 1.916 / 1.0672
25	woodenfish	33817	268 / 23.894 / 0.2030	<u>142</u> / 15.832 / 0.2031	335 / 32.096 / 0.2030
26	wrench50K	36552	<u>58</u> / 5.864 / 0.2021	62 / 7.538 / 0.2021	242 / 24.780 / 0.2020
27	camel	60849	674 / 107.616 / 0.2030	<u>297</u> / 56.602 / 0.2030	1001 / 161.261 / 1.0722
28	camille_hand100K	73639	132 / 27.412 / 0.2022	<u>115</u> / 28.195 / 0.2022	1001 / 228.194 / 590.2897
29	carter100K	82594	<u>148</u> / 43.075 / 0.2021	161 / 48.204 / 0.2021	1001 / 277.613 / 2488.0786
30	casting_refined	37332	300 / 29.173 / 0.2021	<u>203</u> / 24.527 / 0.2022	401 / 40.156 / 0.2021
31	chair100K	90056	<u>238</u> / 61.758 / 0.2005	315 / 95.210 / 0.2005	1001 / 268.841 / 40.4888
32	chair	90862	<u>220</u> / 57.348 / 0.2005	321 / 98.137 / 0.2005	1001 / 267.575 / 0.2004
33	cow2	11836	<u>220</u> / 6.181 / 0.2045	<u>177</u> / 6.393 / 0.2045	243 / 7.975 / 0.2045
34	cup	8949	<u>33</u> / 0.726 / 0.2074	36 / 1.070 / 0.2074	1001 / 26.216 / 1103.4201
35	dancer2	22758	109 / 7.003 / 0.2033	<u>105</u> / 9.668 / 0.2033	298 / 19.296 / 0.2033
36	dancer_25k	43435	115 / 14.000 / 0.2020	<u>104</u> / 16.392 / 0.2020	160 / 19.532 / 0.2019
37	david	51072	<u>237</u> / 31.592 / 0.2059	334 / 55.659 / 0.2059	497 / 67.285 / 0.2059
38	deformed_armadillo	84190	<u>229</u> / 56.163 / 0.2070	357 / 102.610 / 0.2071	1001 / 256.457 / 0.2070
39	dente	14461	60 / 2.222 / 0.2066	38 / 1.813 / 0.2066	127 / 4.884 / 0.2066
40	dilo	43367	173 / 19.906 / 0.2144	<u>100</u> / 14.095 / 0.2144	282 / 33.382 / 0.2144
41	duck	14808	54 / 2.036 / 0.2165	<u>48</u> / 2.369 / 0.2166	110 / 4.292 / 0.2165
42	eight	2166	42 / 0.239 / 0.2115	44 / 0.244 / 0.2115	<u>40</u> / 0.186 / 0.2115
43	elephant	46261	<u>138</u> / 16.905 / 0.2027	173 / 27.259 / 0.2027	402 / 50.015 / 0.2026
44	elk	13468	131 / 4.419 / 0.2152	<u>130</u> / 5.620 / 0.2153	234 / 8.214 / 0.2152
45	eros100K	73348	<u>190</u> / 43.861 / 0.2110	213 / 56.247 / 0.2110	461 / 107.188 / 0.2110
46	face-YO	22632	9 / 0.538 / 0.2150	9 / 0.736 / 0.2150	113 / 8.025 / 0.2150
47	fandisk	10917	<u>59</u> / 1.615 / 0.2012	64 / 2.298 / 0.2011	223 / 6.433 / 0.2011
48	femur	9707	<u>262</u> / 6.034 / 0.2228	326 / 9.905 / 0.2228	512 / 12.459 / 0.2228
49	fertility_tri	25123	<u>82</u> / 7.187 / 0.2017	110 / 12.350 / 0.2017	186 / 17.823 / 0.2017
50	armadillo	41275	278 / 32.038 / 0.2143	<u>218</u> / 30.781 / 0.2146	1001 / 118.013 / 0.2138
51	fig10_nonuniform	42042	<u>27</u> / 3.271 / 0.9454	31 / 4.558 / 0.9454	212 / 27.517 / 0.9454
52	fig10_uniform	42447	<u>10</u> / 1.466 / 0.9412	<u>10</u> / 1.727 / 0.9412	91 / 14.742 / 0.9412

Table 4: Parameterization E_{BARAP} Result Table

Nr.	Model	Vertices	KP	FP	AKVF
53	fig14_exp_dirichlet	148484	<u>28/ 15.749/</u> 0.5023	31 / 19.300 / 0.5023	177 / 108.400 / 0.5023
54	fig15	49862	<u>46/ 6.723/</u> 0.8523	55 / 9.880 / 0.8523	593 / 92.564 / 0.8523
55	fig16	51257	<u>78/ 12.226/</u> 0.2219	<u>77/ 14.346/</u> 0.2219	119 / 19.294 / 0.2219
56	armchair	60746	<u>74/ 12.449/</u> 0.2060	<u>74/ 15.043/</u> 0.2060	248 / 43.450 / 0.2060
57	fig3	5691	<u>39/ 0.643/</u> 0.9080	<u>35/ 0.714/</u> 0.9080	349 / 5.831 / 0.9080
58	fig5	49622	<u>58/ 9.134/</u> 1.0526	64 / 12.113 / 1.0526	731 / 124.027 / 1.0526
59	fig7	151415	<u>270 / 130.600 /</u> 0.2462	<u>247 / 141.615 /</u> 0.2462	<u>126/ 63.634/</u> 0.2462
60	fig8	235771	<u>14/ 13.364/</u> 0.3592	<u>14/ 14.948/</u> 0.3592	109 / 116.297 / 0.3592
61	fig9	95712	<u>25/ 8.564/</u> 0.5336	27 / 10.874 / 0.5336	339 / 130.553 / 0.5336
62	fish	16009	<u>158 / 6.340 /</u> 0.2020	<u>68/ 3.537/</u> 0.2021	118 / 4.806 / 0.2020
63	beetle_refined	31362	<u>150 / 13.366 /</u> 0.2073	<u>124/ 12.648/</u> 0.2075	346 / 31.419 / 0.2075
64	foot	13179	<u>51/ 2.080/</u> 0.9927	70 / 3.572 / 0.9927	498 / 21.332 / 0.9927
65	gargoyle100K	103285	<u>782 / 234.082 /</u> 0.2050	<u>498/ 171.377/</u> 0.2051	1001 / 312.512 / 8.0525
66	genus3	11640	<u>103/ 2.929/</u> 0.2036	<u>85/ 3.173/</u> 0.2036	133 / 3.880 / 0.2036
67	hand_olivier	6849	<u>483/ 9.156/</u> 1.1747	588 / 14.596 / 1.1746	1001 / 20.354 / 1.1747
68	hand	4186	<u>462 / 4.983 /</u> 1.4870	<u>348/ 4.911/</u> 1.4870	1001 / 11.603 / 1.4870
69	helmet	2703	<u>111/ 0.655/</u> 0.2107	<u>108/ 0.800/</u> 0.2107	1001 / 6.248 / 2543.2416
70	hilbert20k	21730	<u>49/ 2.503/</u> 0.2000	51 / 3.442 / 0.2000	50 / 2.564 / 0.2000
71	bimba100K	73725	<u>124/ 27.709/</u> 0.2074	<u>115/ 30.524/</u> 0.2074	698 / 173.910 / 0.2074
72	holes3	12036	<u>117 / 3.526 /</u> 0.2033	<u>92/ 3.505/</u> 0.2033	168 / 5.086 / 0.2033
73	homer	14079	<u>154/ 5.250/</u> 0.2076	165 / 7.323 / 0.2076	261 / 9.371 / 0.2076
74	horse	32372	<u>208/ 17.854/</u> 0.2091	<u>164/ 17.907/</u> 0.2092	1001 / 89.908 / 0.2091
75	igea100k	73221	<u>165/ 37.117/</u> 0.2015	181 / 46.407 / 0.2015	496 / 107.585 / 0.2015
76	isidore_horse	79491	<u>317 / 72.352 /</u> 0.2035	<u>237/ 62.710/</u> 0.2035	545 / 126.832 / 0.2035
77	joint	24566	<u>38/ 2.830/</u> 0.2033	<u>36/ 3.665/</u> 0.2033	64 / 5.865 / 0.2033
78	julius	65458	<u>16/ 3.220/</u> 0.3256	<u>15/ 3.606/</u> 0.3256	302 / 68.887 / 0.3256
79	kitten100K	73605	<u>369 / 76.726 /</u> 0.2037	<u>147/ 37.401/</u> 0.2038	543 / 116.243 / 0.2037
80	knot100K	69224	<u>651 / 141.536 /</u> 0.2159	<u>196/ 50.813/</u> 0.2161	362 / 82.049 / 0.2159
81	knot1	1356	<u>43/ 0.150/</u> 0.2071	45 / 0.153 / 0.2071	63 / 0.177 / 0.2071
82	laurent_hand	72343	<u>705 / 162.519 /</u> 0.2020	<u>149/ 39.889/</u> 0.2020	619 / 149.098 / 0.2020
83	lion_recon_50K	49717	<u>143 / 18.847 /</u> 0.2055	<u>124/ 17.960/</u> 0.2055	1001 / 127.598 / 595.5729
84	lucy100k	93619	<u>626/ 162.472/</u> 0.2068	807 / 248.252 / 0.2068	1001 / 267.882 / 0.2068
85	magalie_hand100K	70976	<u>178/ 38.881/</u> 0.2022	181 / 46.423 / 0.2022	337 / 74.224 / 0.2022
86	mannequin-devil	23450	<u>84 / 5.698 /</u> 0.9984	<u>68/ 5.194/</u> 0.9984	1001 / 70.601 / 0.9984
87	mannequin_mc	65468	<u>43/ 9.587/</u> 0.9661	<u>42/ 10.848/</u> 0.9661	771 / 188.368 / 0.9661
88	mask	37138	<u>14/ 1.521/</u> 0.2195	<u>14/ 1.769/</u> 0.2195	100 / 11.930 / 0.2195
89	master_cylinder100K	65029	<u>94/ 18.426/</u> 0.2053	104 / 24.127 / 0.2053	996 / 226.392 / 0.2053
90	max-planck	71276	<u>123/ 29.754/</u> 1.3595	128 / 36.776 / 1.3595	1001 / 254.775 / 341.9306
91	moai	15759	<u>31/ 1.555/</u> 0.2060	35 / 1.930 / 0.2060	143 / 6.914 / 0.2060
92	block	7612	<u>263 / 4.520 /</u> 0.2052	<u>117/ 2.468/</u> 0.2052	502 / 9.027 / 0.2052
93	mouse	27907	<u>193/ 14.950/</u> 0.2044	1001 / 92.151 / 0.2514	570 / 44.034 / 0.2044
94	neptune0	92193	<u>392/ 108.410/</u> 0.2043	448 / 141.875 / 0.2042	1001 / 294.717 / 5.7385
95	nicolo_da_uzzano	75396	<u>26/ 6.633/</u> 0.2742	27 / 7.855 / 0.2742	833 / 223.055 / 0.2742
96	oni	4234	<u>103/ 1.110/</u> 1.2060	87 / 1.241 / 1.2060	1001 / 11.521 / 1.2060
97	pear	15063	<u>41/ 1.573/</u> 0.2106	44 / 2.228 / 0.2106	88 / 3.446 / 0.2106
98	pegaso	36055	<u>210/ 20.806/</u> 0.2062	231 / 26.445 / 0.2062	707 / 66.627 / 0.2062
99	pensatore	69833	<u>97/ 20.376/</u> 0.2052	112 / 27.759 / 0.2052	292 / 64.811 / 0.2051
100	pierrot100k	69508	<u>131/ 25.637/</u> 0.2036	161 / 37.859 / 0.2036	230 / 45.814 / 0.2036
101	botijo	64847	<u>158/ 28.546/</u> 0.2034	168 / 36.002 / 0.2034	1001 / 207.387 / 1352.4902

2. Deformation Results

Here, we give the statistics for the 16 deformation test cases. Each triplet denotes the: number of iterations / total runtime / final energy. The runtime of the method with the lowest runtime is denoted in bold. The method with the lowest number of iterations is underlined.

Table 5: Deformation E_{SD} Result Table

Nr.	Model	KP	CM	FP	AKVF
1	Archery	<u>15</u> / 0.329/ 2.2105	<u>15</u> / 0.297 / 2.2105	18 / 0.500 / 2.2105	99 / 2.443 / 2.2105
2	annulus	34 / 0.697 / 2.0085	34 / 0.703 / 2.0085	34 / 0.959 / 2.0085	<u>13</u> / 0.296 / 2.0085
3	blue	<u>16</u> / 0.345/ 2.0378	<u>16</u> / 0.322 / 2.0378	<u>16</u> / 0.449/ 2.0378	18 / 0.408 / 2.0378
4	colorbar	57 / 1.199 / 2.1082	57 / 1.182 / 2.1082	57 / 2.181 / 2.1082	<u>50</u> / 1.137 / 2.1082
5	deer	<u>16</u> / 0.338 / 2.0402	<u>16</u> / 0.343/ 2.0402	<u>16</u> / 0.489/ 2.0402	65 / 1.426 / 2.0402
6	dragon	<u>37</u> / 0.875 / 2.0772	<u>37</u> / 0.941/ 2.0772	38 / 1.189 / 2.0772	67 / 1.641 / 2.0772
7	elephant	<u>18</u> / 0.384/ 2.0424	<u>18</u> / 0.382 / 2.0424	<u>18</u> / 0.471/ 2.0424	54 / 1.304 / 2.0424
8	frog	<u>15</u> / 0.321/ 2.0656	<u>15</u> / 0.317 / 2.0656	<u>15</u> / 0.442/ 2.0656	48 / 1.108 / 2.0656
9	giraffe	<u>56</u> / 1.208 / 2.0922	<u>56</u> / 1.260/ 2.0922	57 / 1.737 / 2.0922	58 / 1.303 / 2.0922
10	horse	<u>25</u> / 0.524/ 2.0516	<u>25</u> / 0.513 / 2.0516	26 / 0.832 / 2.0516	55 / 1.243 / 2.0515
11	jackbean	36 / 0.771 / 2.1211	36 / 0.766 / 2.1211	<u>33</u> / 0.951/ 2.1211	121 / 2.683 / 2.1211
12	monkey	17 / 0.360 / 2.0352	17 / 0.359 / 2.0352	18 / 0.541 / 2.0352	<u>15</u> / 0.322 / 2.0352
13	raccoon	11 / 0.237 / 2.0369	11 / 0.216 / 2.0369	<u>10</u> / 0.295/ 2.0369	24 / 0.529 / 2.0369
14	raptor	<u>16</u> / 0.333 / 2.8665	<u>16</u> / 0.412/ 2.8665	<u>16</u> / 0.482/ 2.8665	244 / 5.611 / 2.8665
15	rex	<u>11</u> / 0.265/ 2.0439	<u>11</u> / 0.217 / 2.0439	<u>11</u> / 0.332/ 2.0439	22 / 0.491 / 2.0439
16	trol	<u>17</u> / 0.342 / 2.0196	<u>17</u> / 0.361/ 2.0196	<u>17</u> / 0.559/ 2.0196	29 / 0.646 / 2.0196

Table 6: Deformation E_{SARAP} Result Table

Nr.	Model	KP	CM	FP	AKVF
1	Archery	21 / 0.557 / 0.1691	<u>20</u> / 0.426 / 0.1691	25 / 0.727 / 0.1691	135 / 3.327 / 0.1691
2	annulus	33 / 0.688 / 0.0047	33 / 0.680 / 0.0047	33 / 0.946 / 0.0047	<u>17</u> / 0.399 / 0.0047
3	blue	32 / 0.684 / 0.0243	32 / 0.695 / 0.0243	34 / 1.013 / 0.0243	<u>22</u> / 0.481 / 0.0243
4	colorbar	<u>29</u> / 0.649 / 0.0743	36 / 0.778 / 0.0742	38 / 1.160 / 0.0742	69 / 1.524 / 0.0742
5	deer	<u>14</u> / 0.304/ 0.0270	<u>14</u> / 0.292 / 0.0270	<u>14</u> / 0.411/ 0.0270	83 / 1.887 / 0.0270
6	dragon	30 / 0.742 / 0.0536	29 / 0.770 / 0.0536	<u>27</u> / 0.936/ 0.0536	80 / 2.109 / 0.0536
7	elephant	<u>14</u> / 0.306 / 0.0279	<u>14</u> / 0.327/ 0.0279	15 / 0.469 / 0.0279	45 / 1.126 / 0.0279
8	frog	<u>14</u> / 0.320/ 0.0471	<u>14</u> / 0.297 / 0.0471	15 / 0.427 / 0.0471	46 / 1.025 / 0.0471
9	giraffe	77 / 1.666 / 0.0645	77 / 1.637 / 0.0645	52 / 1.546 / 0.0645	<u>44</u> / 0.998 / 0.0648
10	horse	19 / 0.414 / 0.0349	20 / 0.448 / 0.0349	<u>15</u> / 0.442/ 0.0349	72 / 1.612 / 0.0349
11	jackbean	47 / 1.041 / 0.0885	47 / 0.990 / 0.0885	<u>46</u> / 1.345/ 0.0885	145 / 3.244 / 0.0878
12	monkey	<u>17</u> / 0.381/ 0.0225	<u>17</u> / 0.362 / 0.0225	<u>17</u> / 0.572/ 0.0225	23 / 0.520 / 0.0225
13	raccoon	<u>14</u> / 0.298/ 0.0246	<u>14</u> / 0.276 / 0.0246	<u>14</u> / 0.382/ 0.0246	28 / 0.604 / 0.0246
14	raptor	66 / 1.683 / 0.8212	<u>59</u> / 1.495 / 0.8213	63 / 2.020 / 0.8212	419 / 10.096 / 0.8246
15	rex	<u>12</u> / 0.278/ 0.0275	13 / 0.275 / 0.0275	13 / 0.394 / 0.0275	29 / 0.645 / 0.0275
16	trol	18 / 0.398 / 0.0119	18 / 0.391 / 0.0119	<u>17</u> / 0.504/ 0.0119	32 / 0.706 / 0.0119

Table 7: Deformation E_{BCONF} Result Table

Nr.	Model	KP	FP	AKVF
1	Archery	8/ 0.170 / 0.2363	7/ 0.194/ 0.2363	45 / 1.038 / 0.2364
2	annulus	<u>26</u> / 0.539 / 0.2013	27 / 0.741 / 0.2013	30 / 0.647 / 0.2013
3	blue	<u>13</u> / 0.280 / 0.2061	<u>13</u> / 0.393/ 0.2061	28 / 0.606 / 0.2061
4	colorbar	62 / 1.370 / 0.2159	61 / 1.732 / 0.2159	<u>33</u> / 0.704 / 0.2169
5	deer	<u>12</u> / 0.272 / 0.2060	13 / 0.361 / 0.2060	25 / 0.560 / 0.2060
6	dragon	22/ 0.583 / 0.2109	<u>21</u> / 0.740/ 0.2109	64 / 1.730 / 0.2112
7	elephant	<u>10</u> / 0.214 / 0.2072	<u>10</u> / 0.271/ 0.2072	23 / 0.494 / 0.2072
8	frog	<u>12</u> / 0.246 / 0.2118	<u>12</u> / 0.356/ 0.2118	33 / 0.730 / 0.2118
9	giraffe	40 / 0.851 / 0.2163	40 / 1.143 / 0.2163	<u>32</u> / 0.698 / 0.2164
10	horse	<u>22</u> / 0.484 / 0.2078	26 / 0.734 / 0.2078	56 / 1.272 / 0.2078
11	jackbean	76/ 1.590 / 0.2206	<u>69</u> / 1.993/ 0.2206	84 / 1.823 / 0.2205
12	monkey	<u>14</u> / 0.402 / 0.2059	<u>14</u> / 0.404/ 0.2059	27 / 0.592 / 0.2059
13	raccoon	<u>9</u> / 0.178 / 0.2059	<u>9</u> / 0.242/ 0.2059	33 / 0.694 / 0.2059
14	raptor	8/ 0.159 / 0.3476	8/ 0.223/ 0.3476	110 / 2.485 / 0.3476
15	rex	8/ 0.154 / 0.2068	8/ 0.209/ 0.2068	23 / 0.496 / 0.2068
16	trol	<u>13</u> / 0.297 / 0.2030	<u>13</u> / 0.363/ 0.2030	24 / 0.531 / 0.2030

Table 8: Deformation E_{BARAP} Result Table

Nr.	Model	KP	FP	AKVF
1	Archery	<u>13</u> / 0.291 / 0.3698	15 / 0.402 / 0.3698	149 / 4.169 / 0.3698
2	annulus	33 / 0.703 / 0.2046	33 / 1.006 / 0.2046	<u>13</u> / 0.308 / 0.2046
3	blue	71 / 1.519 / 0.2215	70 / 2.237 / 0.2215	<u>42</u> / 0.922 / 0.2215
4	colorbar	48/ 1.007 / 0.2398	66 / 1.893 / 0.2396	80 / 1.734 / 0.2387
5	deer	<u>21</u> / 0.461 / 0.2183	22 / 0.668 / 0.2183	62 / 1.400 / 0.2183
6	dragon	<u>28</u> / 0.577 / 0.2289	30 / 0.916 / 0.2289	67 / 1.430 / 0.2289
7	elephant	<u>19</u> / 0.430 / 0.2228	21 / 0.635 / 0.2228	55 / 1.255 / 0.2229
8	frog	<u>16</u> / 0.355 / 0.2428	17 / 0.476 / 0.2428	50 / 1.132 / 0.2429
9	giraffe	57/ 1.214 / 0.2586	<u>56</u> / 1.636/ 0.2586	75 / 1.704 / 0.2589
10	horse	<u>45</u> / 0.960 / 0.2236	55 / 1.589 / 0.2236	74 / 1.591 / 0.2236
11	jackbean	161/ 3.457 / 0.2870	<u>155</u> / 4.567/ 0.2870	250 / 5.700 / 0.2729
12	monkey	<u>20</u> / 0.434 / 0.2176	24 / 0.674 / 0.2176	27 / 0.691 / 0.2176
13	raccoon	<u>12</u> / 0.254 / 0.2233	<u>12</u> / 0.350/ 0.2233	41 / 0.900 / 0.2233
14	raptor	<u>16</u> / 0.334 / 1.0774	<u>16</u> / 0.479/ 1.0774	653 / 15.787 / 1.0780
15	rex	34 / 0.754 / 0.2220	35 / 1.036 / 0.2220	<u>18</u> / 0.413 / 0.2222
16	trol	16 / 0.343 / 0.2103	16 / 0.491 / 0.2103	<u>13</u> / 0.290 / 0.2103
17	u2s	<u>18</u> / 0.435 / 9.9404	<u>18</u> / 0.507/ 9.9404	31 / 0.695 / 9.9404