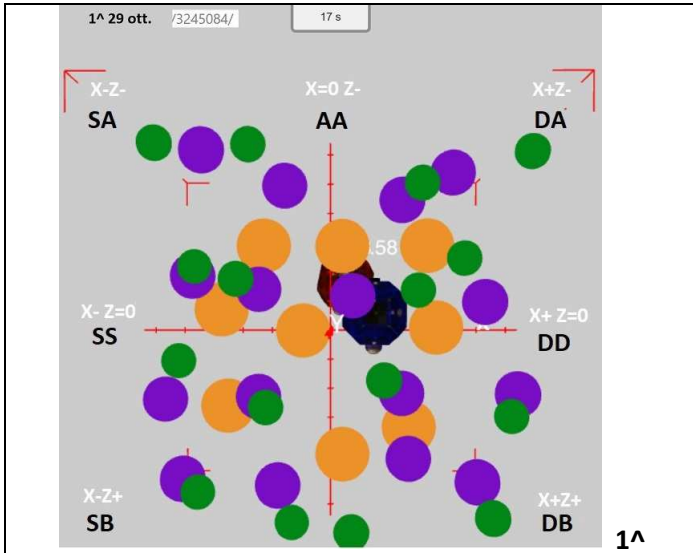


Debug Match di ZiRconium per Leaderboard 29 ottobre 2018



Sphere 1, 17.0s, GT: PHASE 1 complete in 17 seconds!
 Sphere 1, 36.0s, GT: PHASE 2 complete in 19 seconds!
 Sphere 1, 45.0s, GT: Hook collision!
 Sphere 2, 46.0s, GT: Hook collision!
 Fuel: 89% 17 s
 Fuel: 83% 36 s
 Fuel: 76% 46 s
 Fuel: 0% **OUT of BOUNDS Y+**
 Score: **10.218**
 Thruster Health: **75**

Sphere 1, 17.0s, GT: PHASE 1 complete in 17 seconds!
 pX: 0.146 pY: 0.016 pZ: -0.054
 vX: 0.008 vY: -0.037 vZ: -0.003
 nX: -0.014 nY: -1.000 nZ: 0.002
 ?X: -0.000 ?Y: -0.003 ?Z: -0.000

Sphere 1, 36.0s, GT: PHASE 2 complete in 19 seconds!
 pX: 0.211 pY: -0.235 pZ: -0.085
 vX: 0.001 vY: 0.002 vZ: 0.001
 nX: 0.000 nY: -1.000 nZ: 0.003
 ?X: -0.116 ?Y: -0.000 ?Z: -0.001
pX: 0.170 pY: -0.498 pZ: -0.089 RED
vX: 0.003 vY: -0.000 vZ: 0.004
nX: 0.161 nY: 0.981 nZ: -0.106
?X: -0.035 ?Y: 0.001 ?Z: 0.005

Sphere 1, 45.0s, GT: Hook collision!
 pX: 0.211 pY: -0.202 pZ: -0.072
 vX: 0.000 vY: 0.001 vZ: 0.001
 nX: -0.013 nY: -1.000 nZ: -0.011
 ?X: -0.032 ?Y: -0.003 ?Z: -0.069
pX: 0.177 pY: -0.498 pZ: -0.080 RED
vX: 0.000 vY: 0.001 vZ: -0.001
nX: 0.160 nY: 0.983 nZ: -0.089
?X: 0.004 ?Y: 0.000 ?Z: -0.002

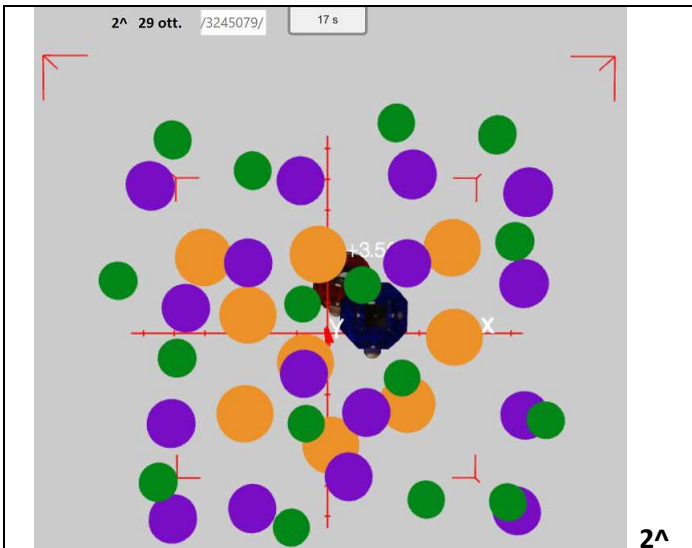
Sphere 2, 46.0s, GT: Hook collision!
 pX: 0.210 pY: -0.202 pZ: -0.072
 vX: -0.000 vY: 0.001 vZ: 0.001
 nX: -0.028 nY: -0.998 nZ: -0.050
 ?X: -0.033 ?Y: -0.005 ?Z: -0.070
pX: 0.178 pY: -0.498 pZ: -0.079 RED
vX: 0.000 vY: 0.000 vZ: -0.000
nX: 0.155 nY: 0.983 nZ: -0.100
?X: 0.004 ?Y: 0.002 ?Z: -0.001

	DEBRIS	1^ simulazione		
00	G	-0.497	+0.517	-0.539
01	G	-0.232	+0.495	-0.540
02	G	+0.260	+0.505	-0.424
03	G	+0.579	+0.493	-0.513
04	G	-0.397	+0.440	-0.195
05	G	-0.264	+0.539	-0.156
06	G	+0.256	+0.496	-0.126
07	G	+0.389	+0.496	-0.210
08	G	-0.434	+0.471	+0.088
09	G	-0.182	+0.509	+0.218
10	G	+0.157	+0.560	+0.140
11	G	+0.529	+0.460	+0.240
12	G	-0.381	+0.455	+0.460
13	G	-0.115	+0.449	+0.557
14	G	+0.062	+0.554	+0.557
15	G	+0.458	+0.557	+0.519
16	P	-0.396	+0.325	-0.550
17	P	-0.145	+0.270	-0.457
18	P	+0.229	+0.313	-0.406
19	P	+0.383	+0.277	-0.491
20	P	-0.424	+0.306	-0.171
21	P	-0.223	+0.289	-0.137
22	P	+0.070	+0.286	-0.112
23	P	+0.472	+0.329	-0.097
24	P	-0.518	+0.272	+0.214
25	P	-0.228	+0.296	+0.209
26	P	+0.228	+0.291	+0.192
27	P	+0.578	+0.326	+0.192
28	P	-0.460	+0.316	+0.455
29	P	-0.166	+0.317	+0.477
30	P	+0.243	+0.304	+0.396
31	P	+0.452	+0.315	+0.461
32	O	-0.226	+0.106	-0.285
33	O	+0.042	+0.095	-0.289
34	O	+0.325	+0.101	-0.282
35	O	-0.361	+0.105	-0.075
36	O	-0.092	+0.102	-0.004
37	O	+0.360	+0.101	-0.019
38	O	-0.348	+0.093	+0.255
39	O	+0.047	+0.103	+0.412
40	O	+0.263	+0.101	+0.325

<http://zerorobotics.mit.edu/ide/simulation/3245084/>

ANALOGA la 7^ simulazione **con identici DEBRIS !!!**

<http://zerorobotics.mit.edu/ide/simulation/3245085/>



Sphere 1, 18.0s, GT: PHASE 1 complete in 18 seconds!
 Sphere 1, 37.0s, GT: PHASE 2 complete in 19 seconds!
 Sphere 2, 41.0s, GT: Hook collision!
 Sphere 1, 41.0s, GT: Hook collision!
 Fuel: 90% 18 s
 Fuel: 85% 37 s
 Fuel: 80% 42 s
 Fuel: 77% 51 s
 toccano le punte dei ganci MA inizia ad allontanarsi
 Fuel: 0% OUT of BOUNDS Y+
 Score: 10.159
 Thruster Health: 90

Sphere 1, 18.0s, GT: PHASE 1 complete
 pX: 0.147 pY:-0.013 pZ:-0.055
 vX: 0.007 vY:-0.031 vZ:-0.003
 nX:-0.003 nY:-1.000 nZ:-0.001
 ?X:-0.000 ?Y: 0.002 ?Z: 0.000

Sphere 1, 37.0s, GT: PHASE 2 complete
 pX: 0.207 pY:-0.223 pZ:-0.081
 vX: 0.001 vY:-0.000 vZ:-0.000
 nX:-0.001 nY:-1.000 nZ:-0.007
 ?X:-0.000 ?Y:-0.001 ?Z:-0.002
 pX: 0.169 pY:-0.497 pZ:-0.089 RED
 vX: 0.004 vY:-0.000 vZ: 0.007
 nX: 0.155 nY: 0.984 nZ:-0.087
 ωX:-0.040 ωY:-0.005 ωZ: 0.011

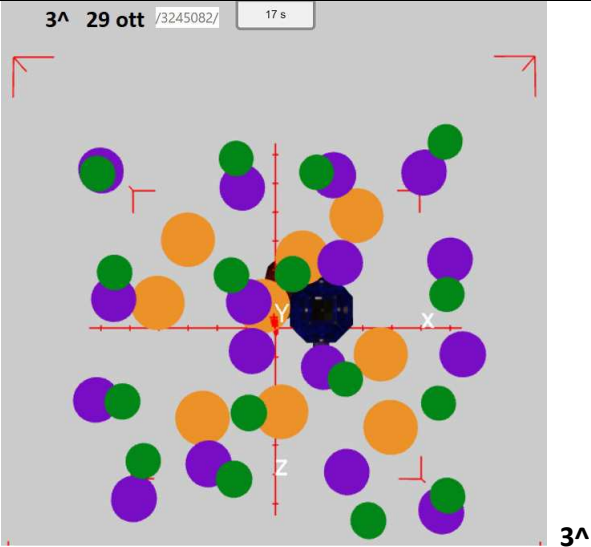
Sphere 2, 41.0s, GT: Hook collision!
 pX: 0.208 pY:-0.208 pZ:-0.074
 vX:-0.001 vY: 0.008 vZ: 0.003
 nX: 0.003 nY:-1.000 nZ: 0.019
 ?X:-0.418 ?Y: 0.000 ?Z:-0.002
 pX: 0.174 pY:-0.496 pZ:-0.073 RED
 vX:-0.000 vY: 0.000 vZ: 0.001
 nX: 0.188 nY: 0.980 nZ:-0.072
 ?X:-0.005 ?Y:-0.006 ?Z:-0.002

Sphere 2, 51.0s, GT: Hook collision!
 pX: 0.200 pY:-0.152 pZ:-0.039
 vX:-0.000 vY: 0.010 vZ: 0.004
 nX:-0.048 nY:-0.952 nZ:-0.302
 ?X:-0.012 ?Y:-0.003 ?Z:-0.002
 pX: 0.179 pY:-0.474 pZ:-0.064 RED
 vX:-0.000 vY:-0.001 vZ:-0.001
 nX: 0.147 nY: 0.983 nZ:-0.108
 ?X:-0.017 ?Y: 0.002 ?Z:-0.011

DEBRIS 2^ simulazione

00	G	-0.411	+0.493	-0.523
01	G	-0.210	+0.499	-0.442
02	G	+0.187	+0.470	-0.572
03	G	+0.442	+0.516	-0.538
04	G	-0.556	+0.516	-0.153
05	G	-0.072	+0.446	-0.094
06	G	+0.090	+0.482	-0.149
07	G	+0.481	+0.548	-0.255
08	G	-0.395	+0.555	+0.053
09	G	-0.065	+0.471	+0.239
10	G	+0.201	+0.449	+0.116
11	G	+0.588	+0.481	+0.223
12	G	-0.444	+0.556	+0.379
13	G	-0.106	+0.475	+0.518
14	G	+0.267	+0.494	+0.438
15	G	+0.484	+0.482	+0.450
16	P	-0.516	+0.302	-0.437
17	P	-0.086	+0.272	-0.458
18	P	+0.248	+0.325	-0.466
19	P	+0.571	+0.321	-0.415
20	P	-0.417	+0.302	-0.081
21	P	-0.238	+0.302	-0.212
22	P	+0.240	+0.282	-0.218
23	P	+0.568	+0.326	-0.159
24	P	-0.457	+0.326	+0.250
25	P	-0.075	+0.297	+0.120
26	P	+0.117	+0.316	+0.225
27	P	+0.579	+0.308	+0.232
28	P	-0.458	+0.304	+0.535
29	P	-0.225	+0.301	+0.505
30	P	+0.060	+0.290	+0.412
31	P	+0.560	+0.297	+0.518
32	O	-0.392	+0.097	-0.244
33	O	-0.030	+0.096	-0.255
34	O	+0.390	+0.108	-0.270
35	O	-0.259	+0.106	-0.061
36	O	-0.080	+0.092	+0.091
37	O	+0.405	+0.092	+0.017
38	O	-0.263	+0.104	+0.251
39	O	+0.012	+0.108	+0.355
40	O	+0.257	+0.108	+0.222

<http://zerorobotics.mit.edu/ide/simulation/3245079/>



Sphere 1, 17.0s, GT: PHASE 1 complete in 17 seconds!
 Fuel: 88% 17s
 Fuel: 0% OUT OF BOUNDS Y-
 Score: 3.583
 Thruster Health: 0

Sphere 1, 17.0s, GT: PHASE 1 complete in 17 seconds!
 pX: 0.152 pY: -0.025 pZ: -0.053
 vX: 0.011 vY: -0.051 vZ: -0.004
 nX: -0.007 nY: -1.000 nZ: 0.000
 ?X: 0.003 ?Y: 0.001 ?Z: -0.002

Analogo comportamento le simulazioni:
 4^ 5^ 9^ e 10^

- <http://zerorobotics.mit.edu/ide/simulation/3245077/>
- <http://zerorobotics.mit.edu/ide/simulation/3245080/>
- <http://zerorobotics.mit.edu/ide/simulation/3245083/>
- <http://zerorobotics.mit.edu/ide/simulation/3245081/>

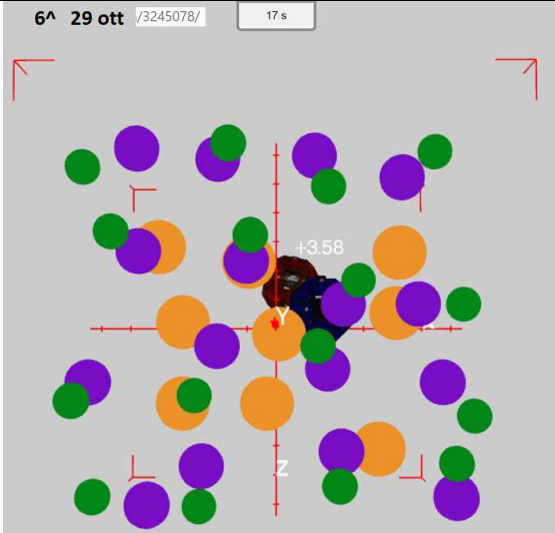
La 6^ simulazione, score 8.34793091, nonostante subisca un danno significativo ai truster (Thruster Health: 15) e resti senza fuel a 165 sec, completa il Rendezvous a 183 s poco prima della fine (oppure è RED a completarlo ?? ...).

Analogo andamento ha il 8^ simulazione.

Dati della 6^ e 8^ simulazione alla pagina seguente

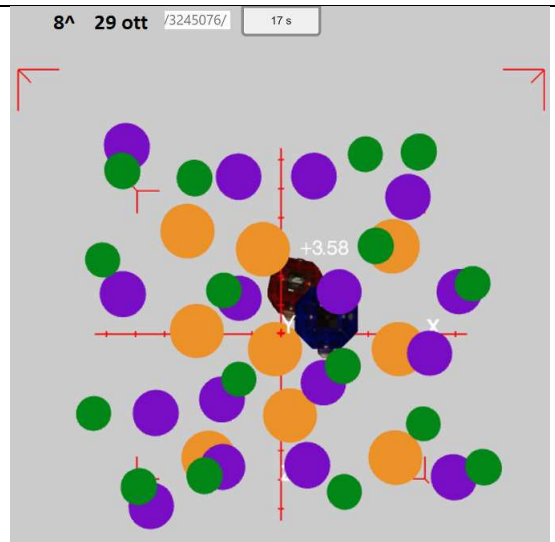
	DEBRIS	3^ simulazione	
00	G	-0.505	+0.509 -0.424
01	G	-0.115	+0.476 -0.472
02	G	+0.125	+0.473 -0.437
03	G	+0.496	+0.461 -0.522
04	G	-0.451	+0.505 -0.145
05	G	-0.128	+0.528 -0.137
06	G	+0.052	+0.551 -0.135
07	G	+0.491	+0.473 -0.080
08	G	-0.424	+0.538 +0.221
09	G	-0.073	+0.556 +0.259
10	G	+0.205	+0.482 +0.166
11	G	+0.471	+0.446 +0.232
12	G	-0.371	+0.487 +0.393
13	G	-0.118	+0.556 +0.431
14	G	+0.270	+0.512 +0.550
15	G	+0.494	+0.469 +0.491
16	P	-0.546	+0.285 -0.484
17	P	-0.103	+0.318 -0.430
18	P	+0.189	+0.304 -0.466
19	P	+0.464	+0.297 -0.473
20	P	-0.506	+0.280 -0.083
21	P	-0.081	+0.307 -0.073
22	P	+0.204	+0.307 -0.194
23	P	+0.545	+0.289 -0.201
24	P	-0.560	+0.288 +0.239
25	P	-0.076	+0.322 +0.087
26	P	+0.154	+0.273 +0.138
27	P	+0.570	+0.320 +0.099
28	P	-0.440	+0.298 +0.531
29	P	-0.206	+0.323 +0.422
30	P	+0.221	+0.286 +0.454
31	P	+0.518	+0.279 +0.578
32	O	-0.295	+0.108 -0.298
33	O	+0.091	+0.104 -0.236
34	O	+0.270	+0.106 -0.375
35	O	-0.391	+0.104 -0.080
36	O	-0.044	+0.094 -0.072
37	O	+0.354	+0.093 +0.093
38	O	-0.247	+0.107 +0.307
39	O	+0.023	+0.092 +0.285
40	O	+0.385	+0.109 +0.337

<http://zerorobotics.mit.edu/ide/simulation/3245082/>



6^

Sphere 1, 17.0s, GT: PHASE 1 complete in 17 seconds!
 Sphere 1, 183.0s, GT: PHASE 2 complete in 166 seconds!
 Fuel: 88% 17 s
 Fuel: 0% 165 s
 Fuel: 0% 183 s
 Score: 8.348
 Thruster Health: 15



8^

Sphere 1, 17.0s, GT: PHASE 1 complete in 17 seconds!
 Sphere 1, 182.0s, GT: PHASE 2 complete in 165 seconds!
 Fuel: 88% 17 s
 Fuel: 28% 186 s
 Fuel: 17% 217 s
 Score: 8.441
 Thruster Health: 25

<http://zerorobotics.mit.edu/ide/simulation/3245076/>

DEBRIS

6^ simulazione

00	G	-0.551	+0.483	-0.456
01	G	-0.138	+0.552	-0.503
02	G	+0.157	+0.506	-0.393
03	G	+0.462	+0.458	-0.501
04	G	-0.467	+0.524	-0.263
05	G	-0.080	+0.529	-0.254
06	G	+0.244	+0.443	-0.130
07	G	+0.550	+0.454	-0.060
08	G	-0.562	+0.554	+0.213
09	G	-0.239	+0.484	+0.203
10	G	+0.120	+0.505	+0.061
11	G	+0.575	+0.457	+0.266
12	G	-0.518	+0.515	+0.487
13	G	-0.221	+0.446	+0.520
14	G	+0.188	+0.513	+0.454
15	G	+0.515	+0.497	+0.398

16	P	-0.434	+0.291	-0.550
17	P	-0.187	+0.280	-0.527
18	P	+0.124	+0.288	-0.536
19	P	+0.393	+0.296	-0.463
20	P	-0.428	+0.315	-0.234
21	P	-0.098	+0.311	-0.205
22	P	+0.218	+0.271	-0.079
23	P	+0.444	+0.284	-0.070
24	P	-0.579	+0.322	+0.171
25	P	-0.183	+0.301	+0.065
26	P	+0.162	+0.285	+0.136
27	P	+0.512	+0.307	+0.170
28	P	-0.395	+0.326	+0.550
29	P	-0.231	+0.270	+0.437
30	P	+0.206	+0.316	+0.388
31	P	+0.552	+0.304	+0.525

32	O	-0.393	+0.097	-0.272
33	O	-0.092	+0.104	-0.225
34	O	+0.418	+0.104	-0.253
35	O	-0.311	+0.091	-0.030
36	O	+0.014	+0.102	+0.020
37	O	+0.410	+0.095	-0.056
38	O	-0.320	+0.093	+0.251
39	O	-0.030	+0.096	+0.252
40	O	+0.347	+0.091	+0.403

<http://zerorobotics.mit.edu/ide/simulation/3245078/>