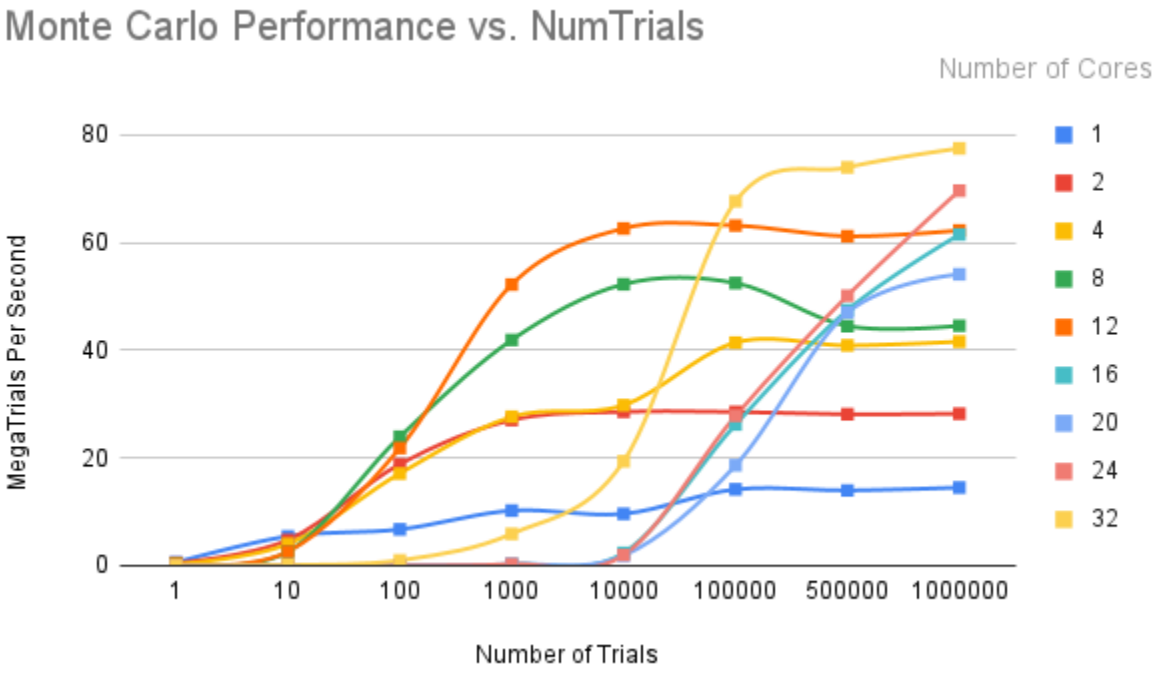
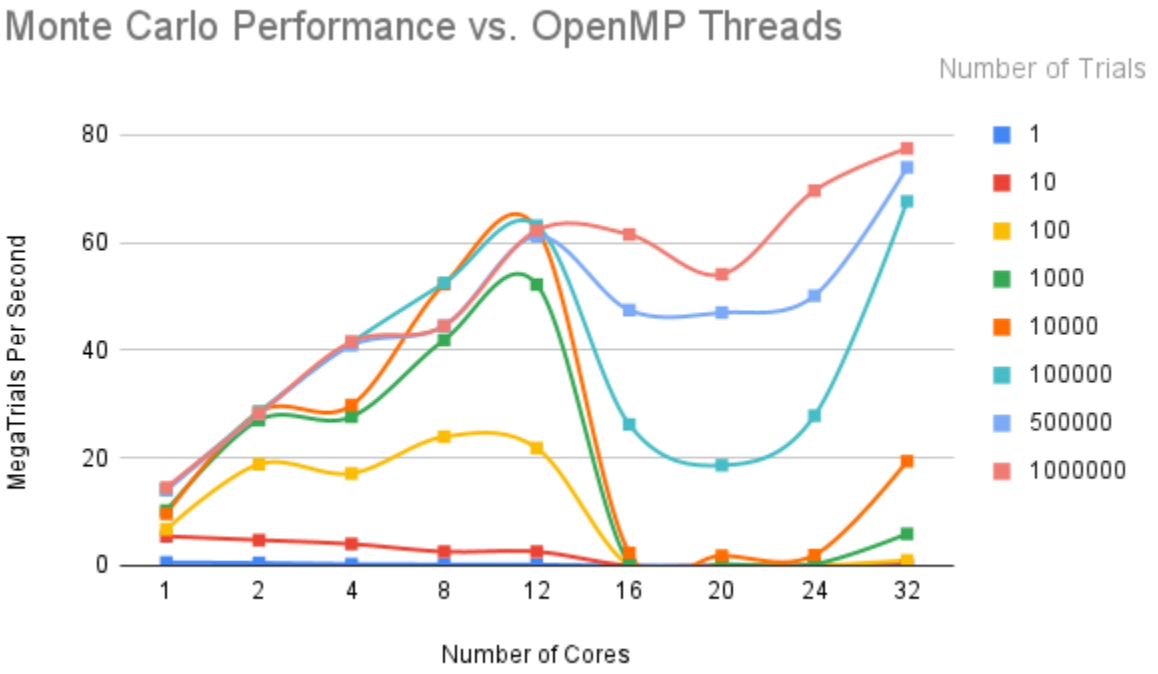
Adrien Protzel





	Threads								
Trials		1	10	100	1000	10000	100000	500000	1000000
	1	0.61	5.46	6.75	10.23	9.64	14.17	13.98	14.51
	2	0.5	4.76	18.86	27.06	28.58	28.56	28.13	28.23
	4	0.29	4.03	17.13	27.66	29.82	41.45	40.91	41.62
	8	0.22	2.6	23.94	41.93	52.29	52.5	44.53	44.58
	12	0.19	2.61	21.85	52.24	62.66	63.18	61.21	62.28
	16	0	0	0.02	0.27	2.38	26.22	47.47	61.52
	20	0	0	0.02	0.28	1.87	18.64	47	54.13
	24	0	0	0.02	0.3	1.98	27.84	50.16	69.68
	32	0.01	0.11	1	5.92	19.4	67.69	73.99	77.52

At 1000000 trials, the accuracy percentages were:

29.10%
29.16%
29.00%
29.10%
28.97%
28.97%
29.02%
29.16%
29.09%

With an average = **29.06%** chance to hit the truck and ruin the truckers day.

10000 trials, n = 16 cores
T1 = 9.64
Tn = 2.38

SpeedUp = $\frac{9.64}{2.38}$ = 4.0504201681

Efficiency = $\frac{4.0504201681}{16}$ = 0.2531512605

F = $\frac{n}{n-1}\left(1 - \frac{1}{S}\right)$ = $\frac{16}{16-1}\left(1 - \frac{1}{4.0504201681}\right)$ = 0.8033195021

Fp = $\frac{P}{P+S}$ = $\frac{1}{1+4.0504201681}$ = 0.1980033278