
Model: Schaffer

Tue, 14 Oct 2014 14:03:07 GMT

Searcher: Particle Swarm Optimization

Settings: phi1: 1.3

Iterations: 100

Min: -100 Max: 100

Number of Particles: 30

phi2: 2.6

Energy: 1.469E-5

Searcher: Differential Evolution

Settings: cf: 0.3

Iterations: 100

Min: -100 Max: 100 NP: 100 f: 0.75

Energy: 3.584E-6

Searcher: Genetic Algorithm

Settings: Max: 100

Generations: 400 Population: 50 crossover: 0.6

Min: -100

Energy: 3.222E-6

Searcher: Simulated Annealing

Settings: Max: 100

Cooling Factor: 0.7 Iterations: 2000

Min: -100

Energy: 3.300E-6

Searcher: Max Walk-SAT

Settings:

```
Max: 100
Retries: 100
Iterations: 100
Min: -100
Energy: 8.785E-4
rank ,
             name, med, iqr
  1 , Genetic Algorithm , 3.22E-06 , 1.46E-11 (*
  1 , Simulated Annealing , 3.24E-06 , 1.30E-07 (*
  1 , Differential Evolution , 3.33E-06 , 5.31E-07 (*
  1 , Particle Swarm Optimization , 6.15E-06 , 8.61E-06 (*
  1, Max Walk-SAT, 5.53E-04, 1.35E-03 (--- * | ------- ), 2.98E-05, 2.84E-04, 6.55E-04, 1.44E-03, 2.21E-03
Model: Kursawe
Tue, 14 Oct 2014 14:03:42 GMT
Searcher: Particle Swarm Optimization
Settings:
phi1: 1.3
Iterations: 100
Min: -5
Max: 5
Number of Particles: 30
phi2: 2.6
Energy: 3.876E-7
Searcher: Differential Evolution
Settings:
cf: 0.3
Iterations: 100
Min: -5
Max: 5
NP: 100
f: 0.75
Energy: 4.687E-8
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), 3.22E-06, 3.22E-06, 3.22E-06, 3.22E-06

), 3.22E-06, 3.23E-06, 3.24E-06, 3.30E-06, 3.50E-06

), 3.22E-06, 3.24E-06, 3.34E-06, 3.70E-06, 4.32E-06

), 3.27E-06, 3.50E-06, 6.22E-06, 9.61E-06, 2.69E-05

Max: 5 Generations: 400 Population: 50 crossover: 0.6

Settings:

Searcher: Genetic Algorithm

```
Min: -5
Energy: -8.753E-7
Searcher: Simulated Annealing
Settings:
Max: 5
Cooling Factor: 0.6
Iterations: 2000
Min: -5
Energy: -6.970E-7
Searcher: Max Walk-SAT
Settings:
Max: 5
Retries: 100
Iterations: 100
Min: -5
Energy: 2.405E-6
rank ,
             name , med , iqr
  1 , Genetic Algorithm , -8.80E-07 , 1.75E-08 (*
                                                                            ), -8.91E-07, -8.83E-07, -8.80E-07, -8.72E-07, -8.52E-07
  1 , Simulated Annealing , -7.36E-07 , 2.23E-07 (*
                                                                              ), -8.56E-07, -7.95E-07, -7.36E-07, -5.86E-07, -4.65E-07
  1 , Differential Evolution , 7.79E-08 , 3.35E-07 (*
                                                                ), -2.59E-07, -6.09E-08, 8.91E-08, 2.15E-07, 3.53E-07
  1 , Particle Swarm Optimization , 3.83E-07 , 5.79E-07 ( -*
                                                                       1
                                                                                     ), -8.82E-08, 1.96E-07, 3.85E-07, 5.41E-07, 9.93E-07
  1 , Max Walk-SAT , 2.20E-06 , 1.26E-06 ( - *--
                                                                       ), 1.32E-06, 2.05E-06, 2.24E-06, 2.93E-06, 3.71E-06
Model: Fonseca
Tue, 14 Oct 2014 14:06:56 GMT
Searcher: Particle Swarm Optimization
Settings:
phi1: 1.3
Iterations: 100
Min: -4
Max: 4
Number of Particles: 30
phi2: 2.6
Energy: 2.929E-6
Searcher: Differential Evolution
Settings:
```

cf: 0.3

```
Iterations: 100
Min: -4
Max: 4
NP: 100
f: 0.75
Energy: 2.929E-6
Searcher: Genetic Algorithm
Settings:
Max: 4
Generations: 400
Population: 50
crossover: 0.6
Min: -4
Energy: 2.929E-6
Searcher: Simulated Annealing
Settings:
Max: 4
Cooling Factor: 1.99
Iterations: 2000
Min: -4
Energy: 2.929E-6
Searcher: Max Walk-SAT
Settings:
Max: 4
Retries: 100
Iterations: 100
Min: -4
Energy: 1.436E-4
rank ,
             name ,
                   med , iqr
  1 , Genetic Algorithm , 2.93E-06 , 2.10E-13 (*
                                                         1
                                                                        ), 2.93E-06, 2.93E-06, 2.93E-06, 2.93E-06
  1 , Simulated Annealing , 2.93E-06 , 2.54E-12 (*
                                                                         ), 2.93E-06, 2.93E-06, 2.93E-06, 2.93E-06
  1 , Differential Evolution , 2.93E-06 , 6.23E-11 (*
                                                             ), 2.93E-06, 2.93E-06, 2.93E-06, 2.93E-06
  1 , Particle Swarm Optimization , 2.93E-06 , 3.62E-10 (*
                                                                                 ), 2.93E-06, 2.93E-06, 2.93E-06, 2.93E-06
  1 , Max Walk-SAT , 5.42E-06 , 1.78E-05 (*-----
                                                                   ), 2.94E-06, 3.02E-06, 6.68E-06, 1.94E-05, 4.99E-04
Model: ZDT1
```

Tue, 14 Oct 2014 14:10:31 GMT

Searcher: Particle Swarm Optimization

Settings: phi1: 1.3

Iterations: 100

Min: 0 Max: 1

Number of Particles: 30

phi2: 2.6

Energy: 2.154E-6

Searcher: Differential Evolution

Settings: cf: 0.3

Iterations: 100

Min: 0 Max: 1 NP: 100 f: 0.75

Energy: 2.084E-6

Searcher: Genetic Algorithm

Settings: Max: 1

Generations: 400
Population: 50
crossover: 0.6

Min: 0

Energy: 1.610E-6

Searcher: Simulated Annealing

Settings: Max: 1

Cooling Factor: 0.007

Iterations: 2000

Min: 0

Energy: 1.698E-6

Searcher: Max Walk-SAT

Settings: Max: 1 Retries: 100

Iterations: 100

Min: 0

Energy: 2.421E-6

```
rank ,
             name ,
                      med , iqr
  1 , Genetic Algorithm , 1.61E-06 , 3.86E-08 (*
                                                                            ), 1.56E-06, 1.59E-06, 1.61E-06, 1.62E-06, 1.68E-06
  1 , Simulated Annealing , 1.66E-06 , 1.30E-07 (*
                                                                              ), 1.59E-06, 1.61E-06, 1.67E-06, 1.73E-06, 1.90E-06
  1 , Differential Evolution , 2.08E-06 , 8.06E-08 (*
                                                                                 ), 2.03E-06, 2.06E-06, 2.09E-06, 2.12E-06, 2.14E-06
                                                                 1 , Particle Swarm Optimization , 2.15E-06 , 5.33E-08 (*
                                                                                     ), 2.12E-06, 2.14E-06, 2.15E-06, 2.18E-06, 2.21E-06
  1 , Max Walk-SAT , 2.44E-06 , 1.72E-07 ( *
                                                                       ), 2.30E-06, 2.36E-06, 2.45E-06, 2.51E-06, 2.57E-06
Model: ZDT3
Tue, 14 Oct 2014 14:15:16 GMT
Searcher: Particle Swarm Optimization
Settings:
phi1: 1.3
Iterations: 100
Min: 0
Max: 1
Number of Particles: 30
phi2: 2.6
Energy: 2.142E-6
Searcher: Differential Evolution
Settings:
cf: 0.3
Iterations: 100
Min: 0
Max: 1
NP: 100
f: 0.75
Energy: 2.091E-6
Searcher: Genetic Algorithm
Settings:
Max: 1
Generations: 400
Population: 50
crossover: 0.6
Min: 0
Energy: 1.601E-6
Searcher: Simulated Annealing
Settings:
Max: 1
```

Cooling Factor: 0.007

```
Iterations: 2000
Min: 0
Energy: 1.659E-6
Searcher: Max Walk-SAT
Settings:
Max: 1
Retries: 100
Iterations: 100
Min: 0
Energy: 2.431E-6
rank ,
             name , med , iqr
  1 , Genetic Algorithm , 1.60E-06 , 5.60E-08 (*
                                                          1
                                                                         ), 1.56E-06, 1.58E-06, 1.60E-06, 1.62E-06, 1.65E-06
  1 , Simulated Annealing , 1.63E-06 , 9.64E-08 (*
                                                             1
                                                                           ), 1.58E-06, 1.61E-06, 1.63E-06, 1.69E-06, 1.82E-06
  1 , Differential Evolution , 2.09E-06 , 5.28E-08 ( *
                                                            I
                                                                              ), 2.05E-06, 2.07E-06, 2.09E-06, 2.12E-06, 2.14E-06
  1 , Particle Swarm Optimization , 2.14E-06 , 6.27E-08 (*
                                                                   I
                                                                                   ), 2.09E-06, 2.12E-06, 2.14E-06, 2.17E-06, 2.21E-06
  1 , Max Walk-SAT , 2.43E-06 , 1.42E-07 ( *
                                                     - 1
                                                                     ), 2.30E-06, 2.37E-06, 2.43E-06, 2.47E-06, 2.61E-06
Model: Viennet3
Tue, 14 Oct 2014 14:21:55 GMT
Searcher: Particle Swarm Optimization
Settings:
phi1: 1.3
Iterations: 100
Min: 0
Max: 1
Number of Particles: 30
phi2: 2.6
Energy: 1.111E-7
Searcher: Differential Evolution
Settings:
cf: 0.3
Iterations: 100
Min: 0
Max: 1
NP: 100
f: 0.75
```

Energy: 5.908E-8

```
Searcher: Genetic Algorithm
Settings:
Max: 1
Generations: 400
Population: 50
crossover: 0.6
Min: 0
Energy: -3.429E-9
Searcher: Simulated Annealing
Settings:
Max: 1
Cooling Factor: 0.007
Iterations: 2000
Min: 0
Energy: 7.730E-9
Searcher: Max Walk-SAT
Settings:
Max: 1
Retries: 100
Iterations: 100
Min: 0
Energy: 4.843E-7
rank ,
             name , med , iqr
  1 , Genetic Algorithm , -3.51E-09 , 2.77E-10 (*
                                                          1
                                                                         ), -3.64E-09, -3.55E-09, -3.51E-09, -3.31E-09, -3.09E-09
  1 , Simulated Annealing , 6.55E-09 , 1.24E-08 (*
                                                                          ), -3.70E-09, 9.65E-10, 6.79E-09, 1.19E-08, 2.25E-08
  1 , Differential Evolution , 6.13E-08 , 6.01E-08 (*
                                                                             ), 1.35E-08, 3.99E-08, 6.21E-08, 8.09E-08, 1.08E-07
                                                              - 1
  1 , Particle Swarm Optimization , 1.05E-07 , 8.69E-08 (*
                                                                                 ), 4.69E-08, 6.76E-08, 1.10E-07, 1.35E-07, 2.06E-07
                                                                  1 , Max Walk-SAT , 4.85E-07 , 2.92E-07 (-*
                                                     1
                                                                    ), 2.44E-07, 3.67E-07, 4.86E-07, 6.26E-07, 7.80E-07
Model: DTLZ7
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Tue, 14 Oct 2014 14:22:31 GMT
Searcher: Particle Swarm Optimization
Settings:
phi1: 1.3
Iterations: 100
Min: 0
Max: 1
```

Number of Particles: 30

```
phi2: 2.6
Energy: 1.836E-5
Searcher: Differential Evolution
Settings:
cf: 0.3
Iterations: 100
Min: 0
Max: 1
NP: 100
f: 0.75
Energy: 1.754E-5
Searcher: Genetic Algorithm
Settings:
Max: 1
Generations: 400
Population: 50
crossover: 0.6
Min: 0
Energy: 9.432E-6
Searcher: Simulated Annealing
Settings:
Max: 1
Cooling Factor: 0.007
Iterations: 2000
Min: 0
Energy: 1.071E-5
Searcher: Max Walk-SAT
Settings:
Max: 1
Retries: 100
Iterations: 100
Min: 0
Energy: 2.216E-5
rank ,
            name , med , iqr
  1 , Genetic Algorithm , 9.44E-06 , 1.94E-07 (*
                                                                      ), 9.19E-06, 9.35E-06, 9.45E-06, 9.51E-06, 9.65E-06
  1 , Simulated Annealing , 1.07E-05 , 7.74E-07 (-*
                                                                       ), 9.91E-06, 1.06E-05, 1.07E-05, 1.10E-05, 1.15E-05
                                                         ), 1.67E-05, 1.73E-05, 1.75E-05, 1.79E-05, 1.83E-05
  1 , Particle Swarm Optimization , 1.84E-05 , 1.43E-06 (
                                                                               ), 1.71E-05, 1.79E-05, 1.85E-05, 1.89E-05, 1.95E-05
  1 , Max Walk-SAT , 2.24E-05 , 1.87E-06 (
                                                                  ), 2.01E-05, 2.14E-05, 2.24E-05, 2.28E-05, 2.47E-05
```