

HNCO  
Runtime as a function of size  
of (1+1) EA and RLS  
on OneMax and LeadingOnes

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# 1 Default parameters

```
# algorithm = 100
# bm_mc_reset_strategy = 1
# bm_num_gs_cycles = 1
# bm_num_gs_steps = 100
# bm_sampling = 1
# budget = 10000
# bv_size = 100
# ea_lambda = 100
# ea_mu = 10
# fun_num_traps = 10
# fun_threshold = 10
# function = 0
# ga_crossover_probability = 0.5
# ga_tournament_size = 10
# hea_binary_dynamics = 0
# hea_delay = 10000
# hea_num_par_updates = 1
# hea_num_seq_updates = 100
# hea_rate_strategy = 0
# hea_reset_period = 0
# hea_sampling_method = 0
# hea_time_constant = 1000
# hea_weight = 1
# learning_rate = 0.001
# map = 0
# map_input_size = 100
# map_path = nopath
# neighborhood = 0
# neighborhood_iterator = 0
# noise_stddev = 1
# num_iterations = 0
# path = nopath
# patience = 50
# plugin_function_name = nofunction
# population_size = 10
# pv_log_num_components = 5
# radius = 2
# sa_initial_acceptance_probability = 0.6
# sa_num_transitions = 50
# sa_num_trials = 100
# sa_rate = 1.2
# scaled_mutation_probability = 1
# seed = 0
# selection_size = 1
# print_default_parameters
# last_parameter
# exec_name = hnco
# version = 0.1
# Generated from hnco.json
```

# 2 Plan

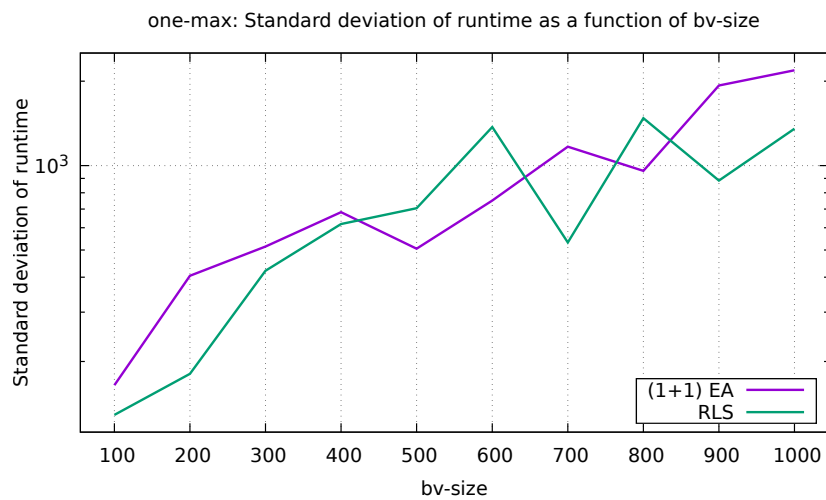
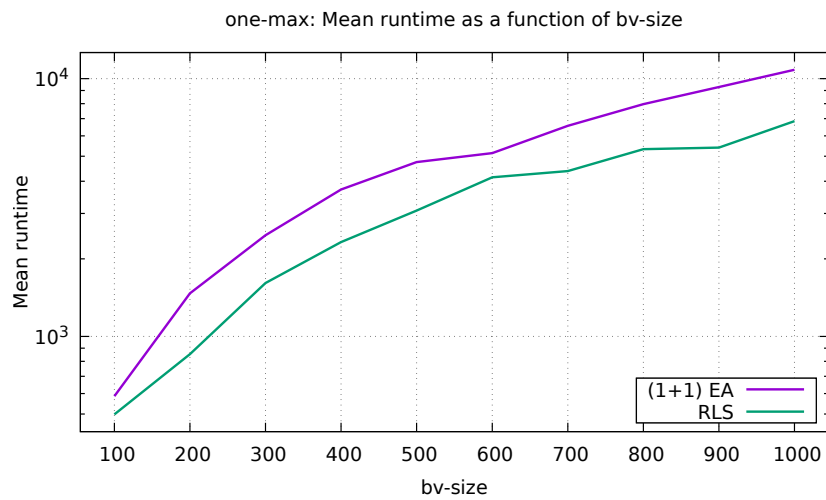
```
{
  "exec": "hnco",
  "opt": "--no-header --print-performance --map 1 --map-random -i 0 -b 0 --stop-on-maximum",
  "num_runs": 10,
  "results": "results",
  "report": "report",
  "graphics": "graphics",
  "parameter": {
    "id": "bv-size",
```

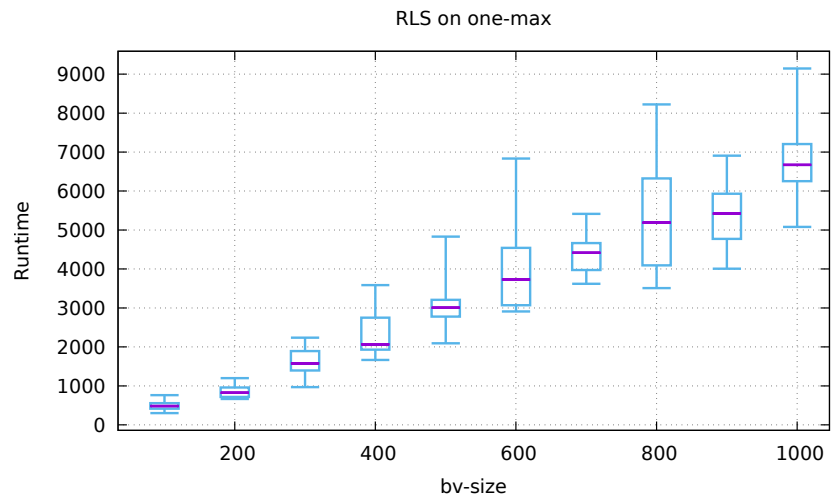
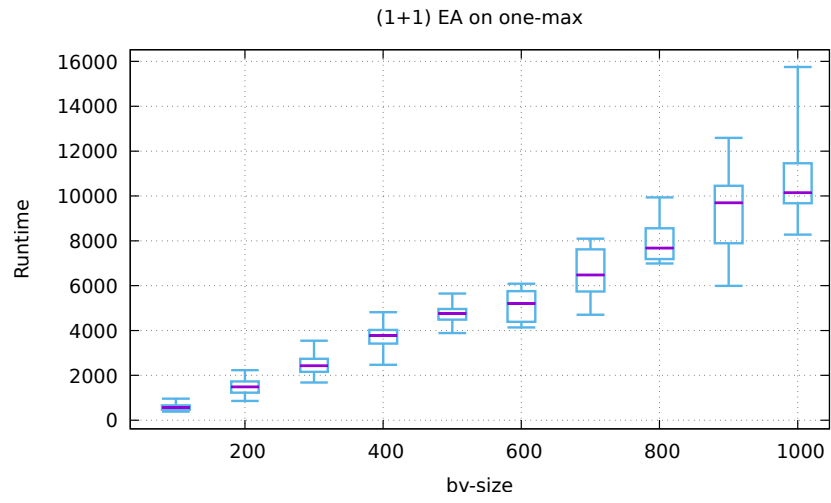
```

    "values": [ 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000 ],
    "boxwidth": "(40)"
  },
  "functions": [
    {
      "id": "one-max",
      "opt": "-F 0"
    },
    {
      "id": "leading-ones",
      "opt": "-F 10"
    }
  ],
  "algorithms": [
    {
      "id": "ea-1p1",
      "title": "(1+1) EA",
      "opt": "-A 300"
    },
    {
      "id": "rls",
      "title": "RLS",
      "opt": "-A 100 --patience 0"
    }
  ]
}

```

### 3 Function one-max





## 4 Function leading-ones

