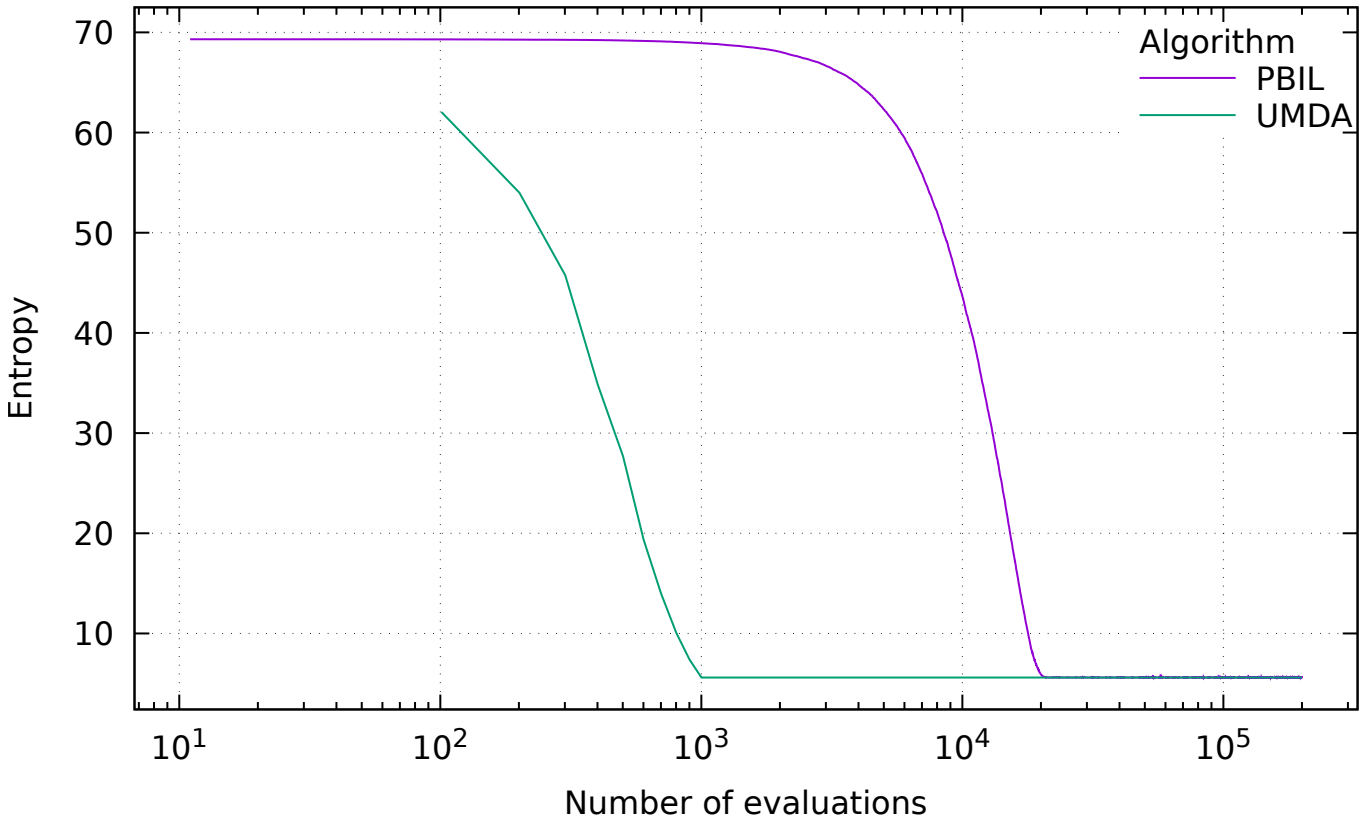
HNCO
Evolution of entropy
in PBIL and UMDA

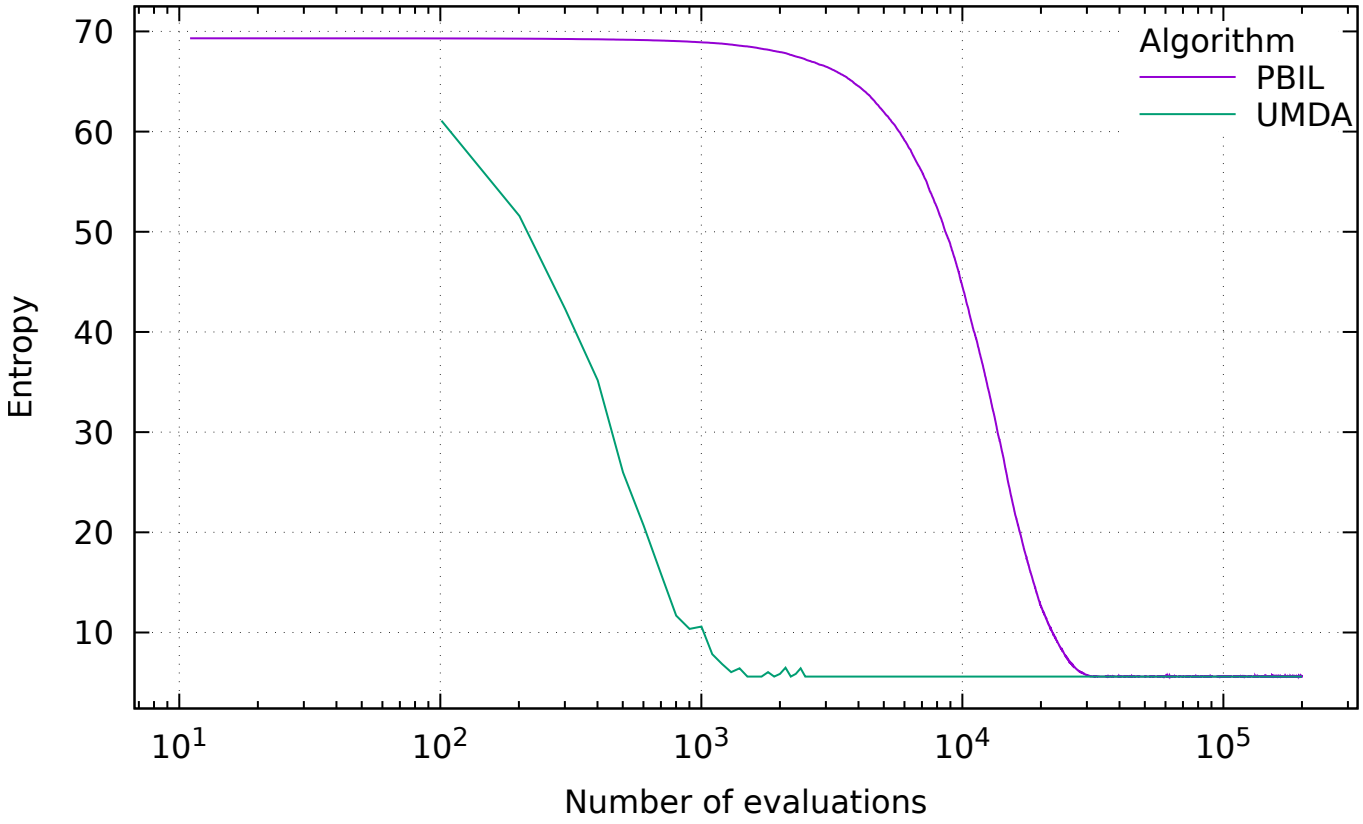
October 28, 2022

Contents

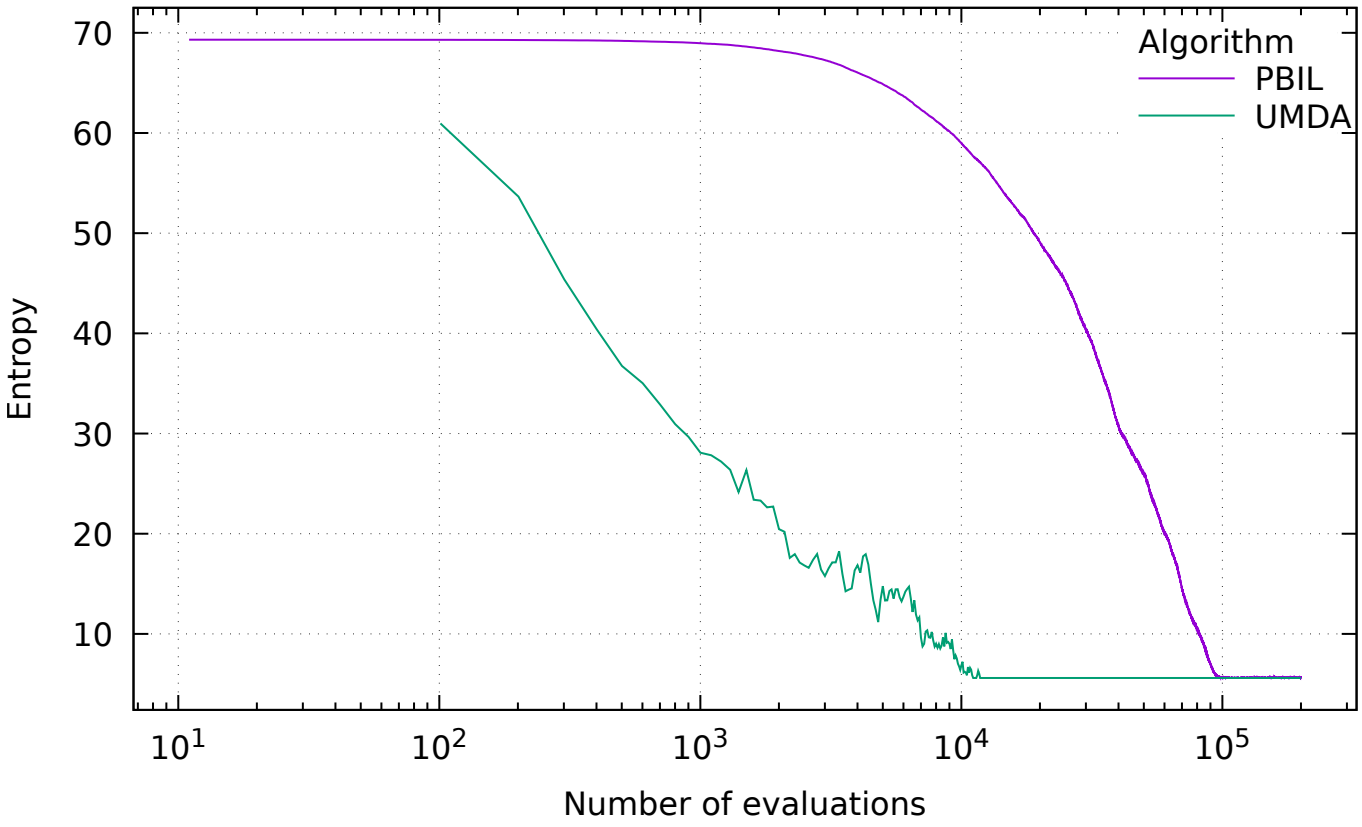
1 OneMax



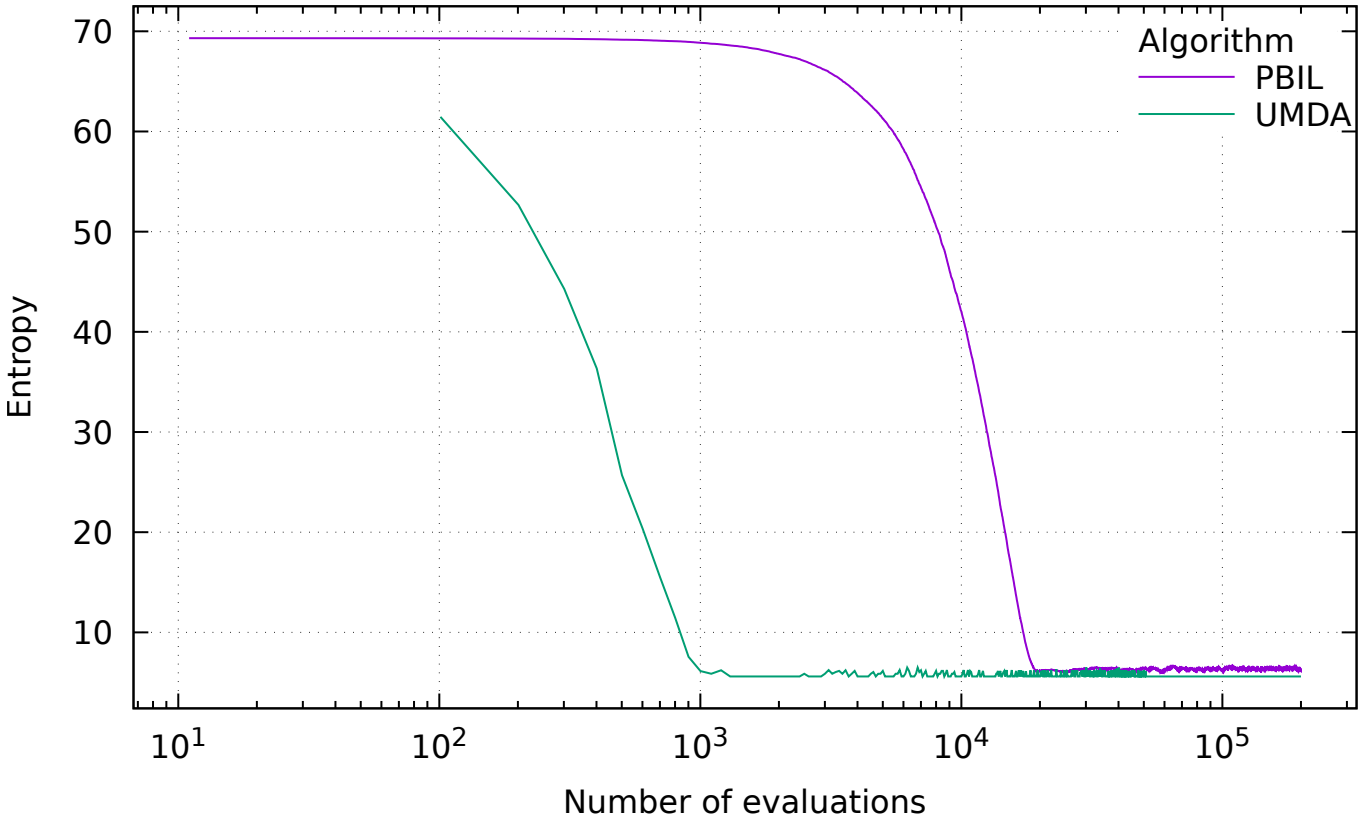
2 Linear



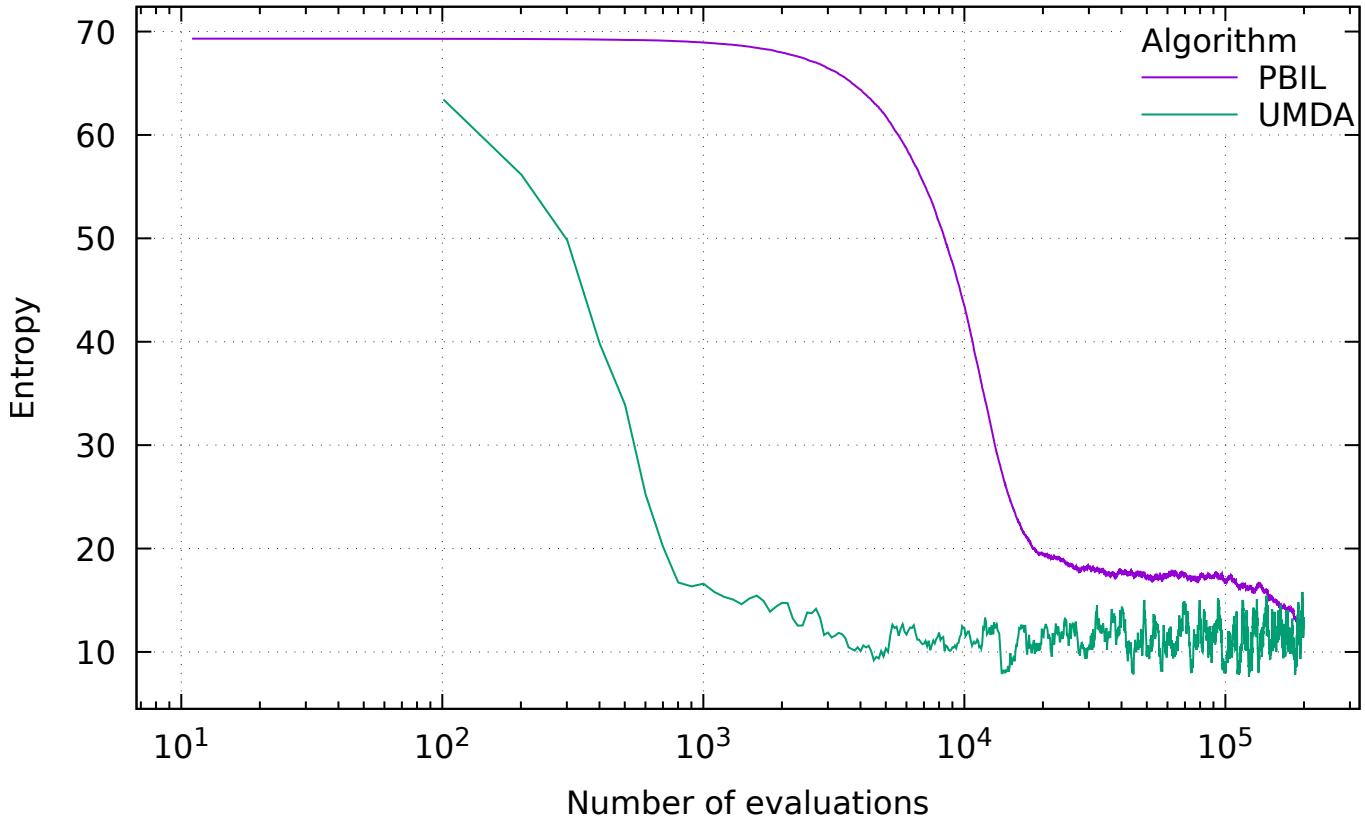
3 LeadingOnes



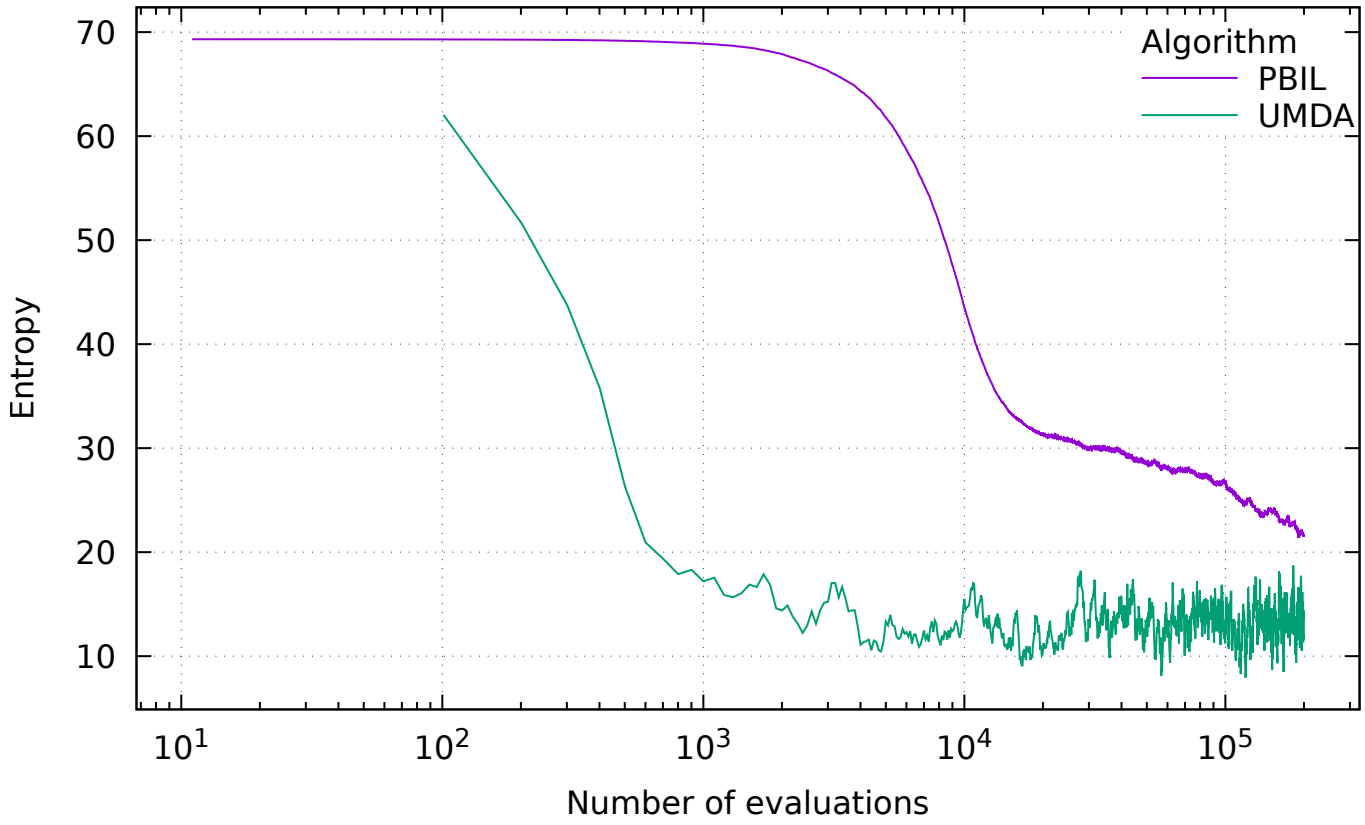
4 Ridge



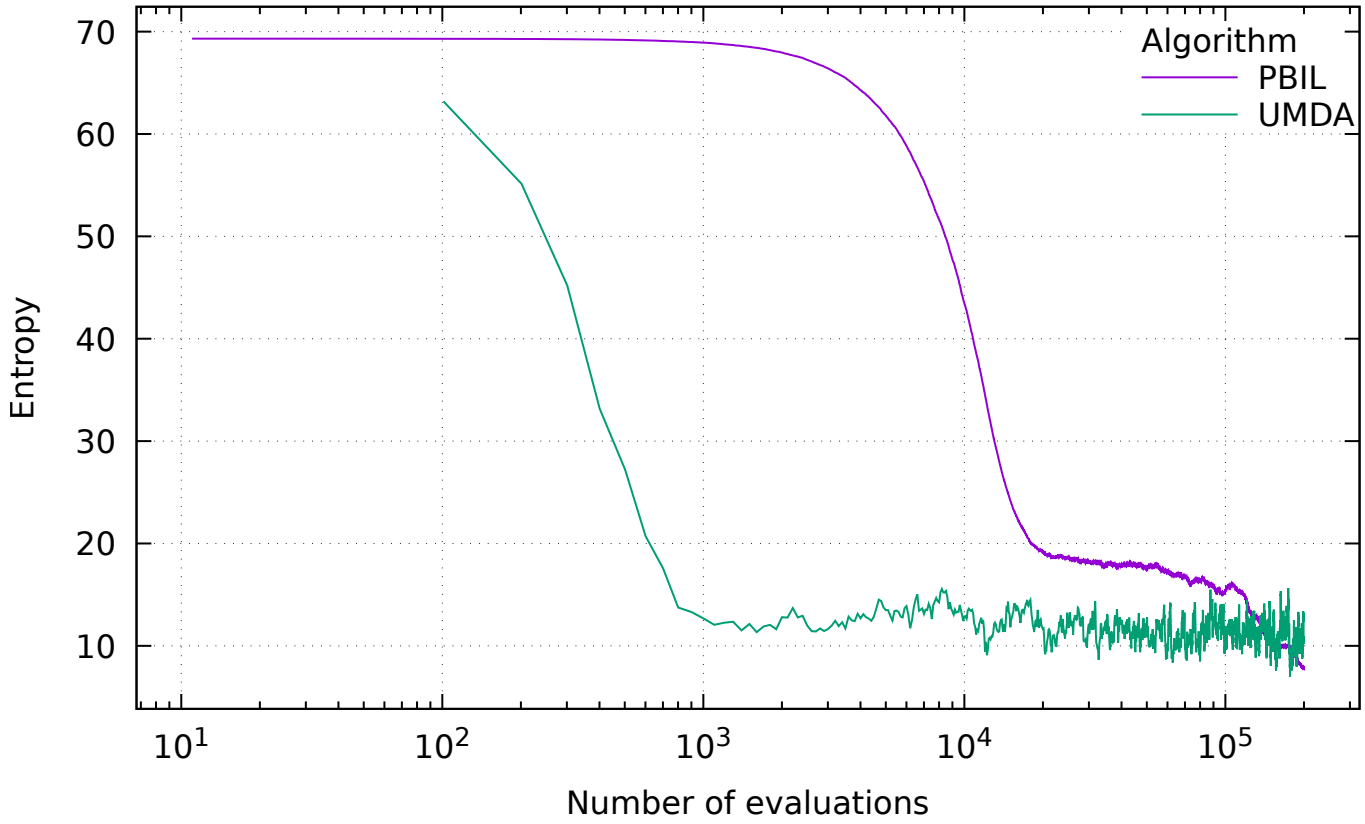
5 Jump (5)



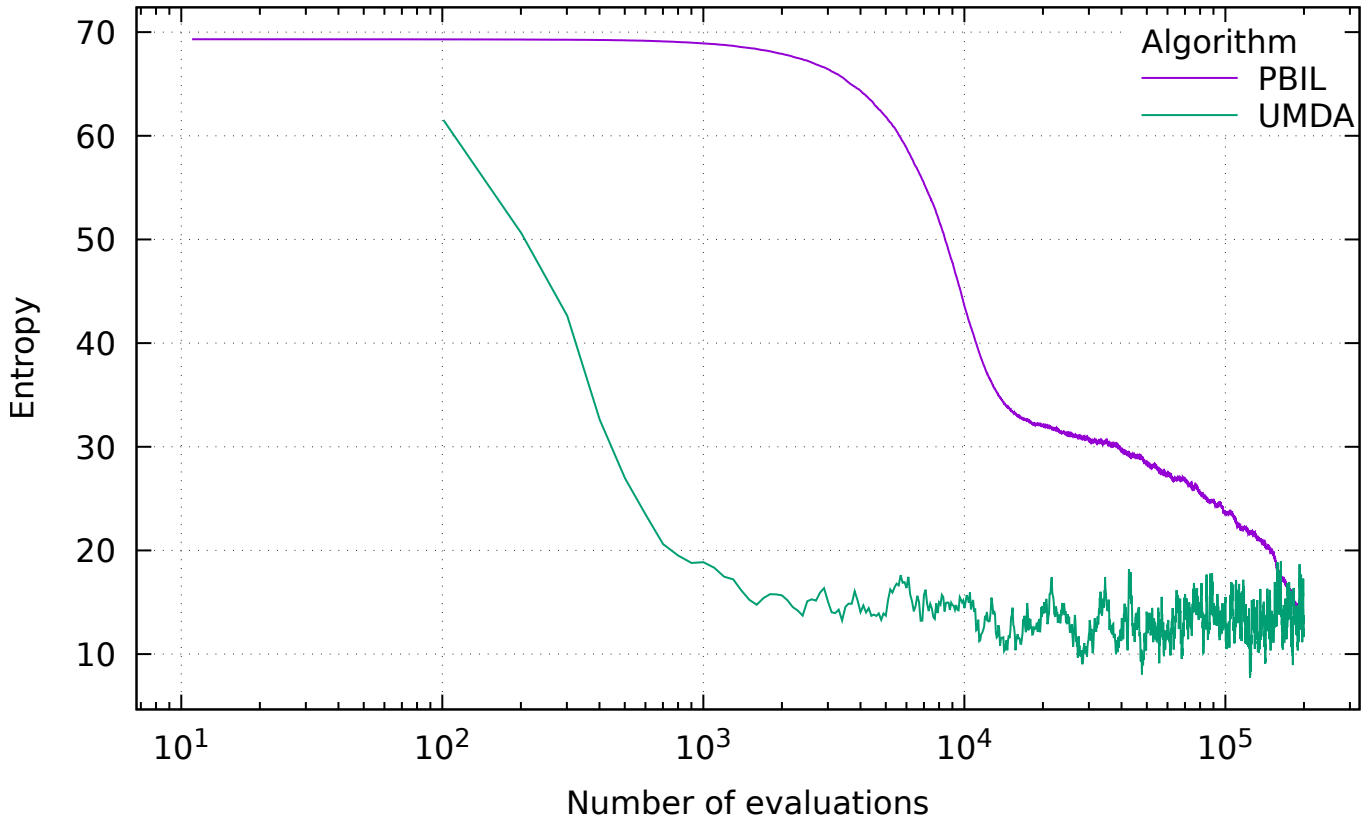
6 Jump (10)



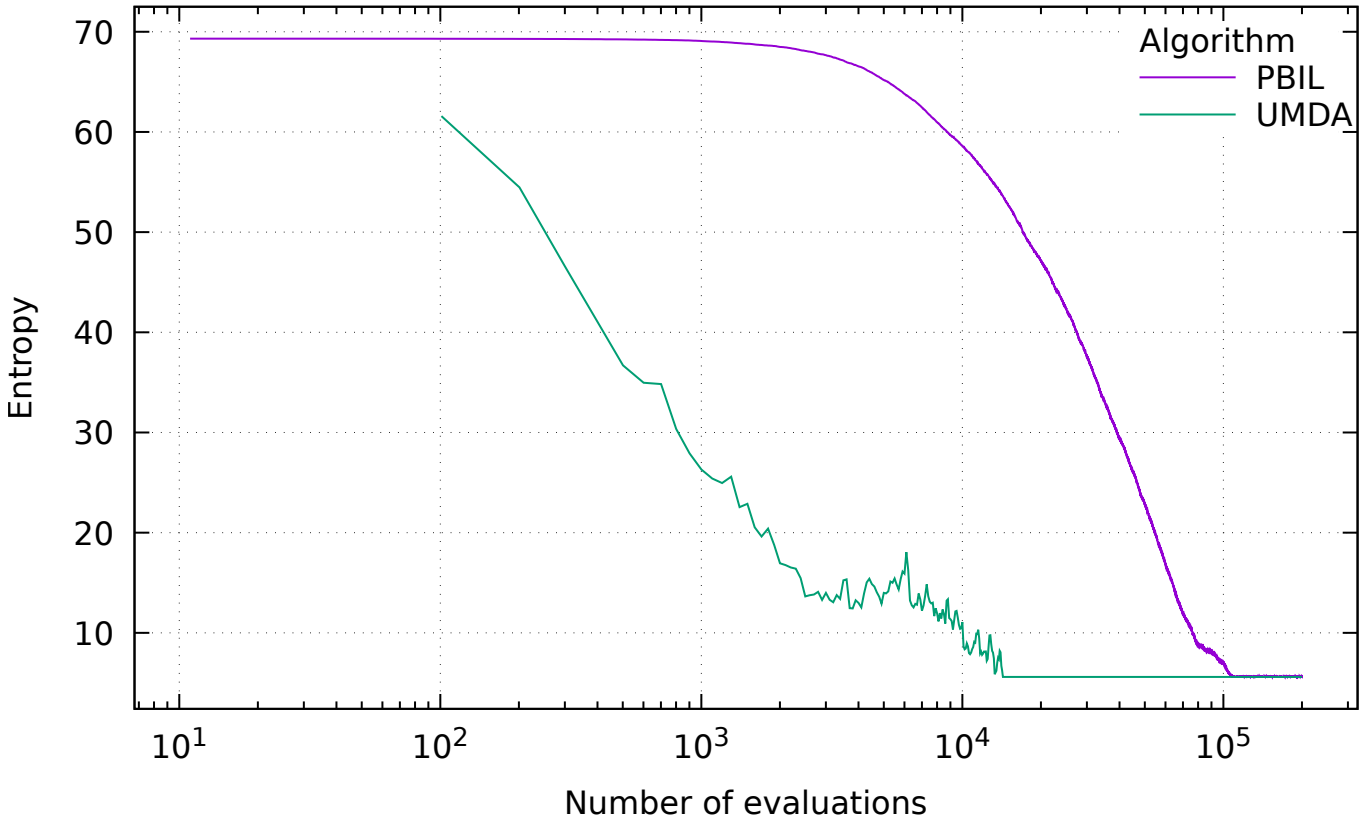
7 Deceptive Jump (5)



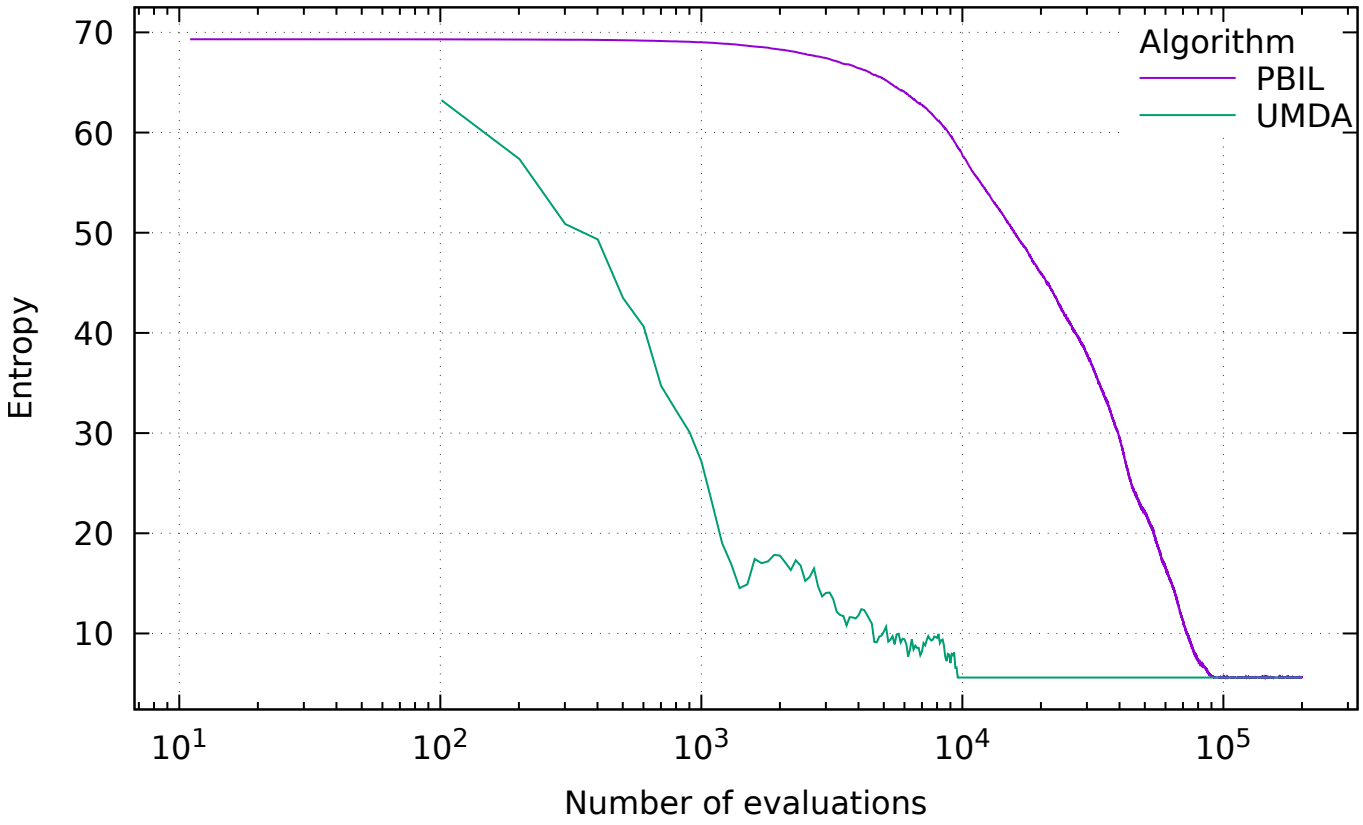
8 Deceptive Jump (10)



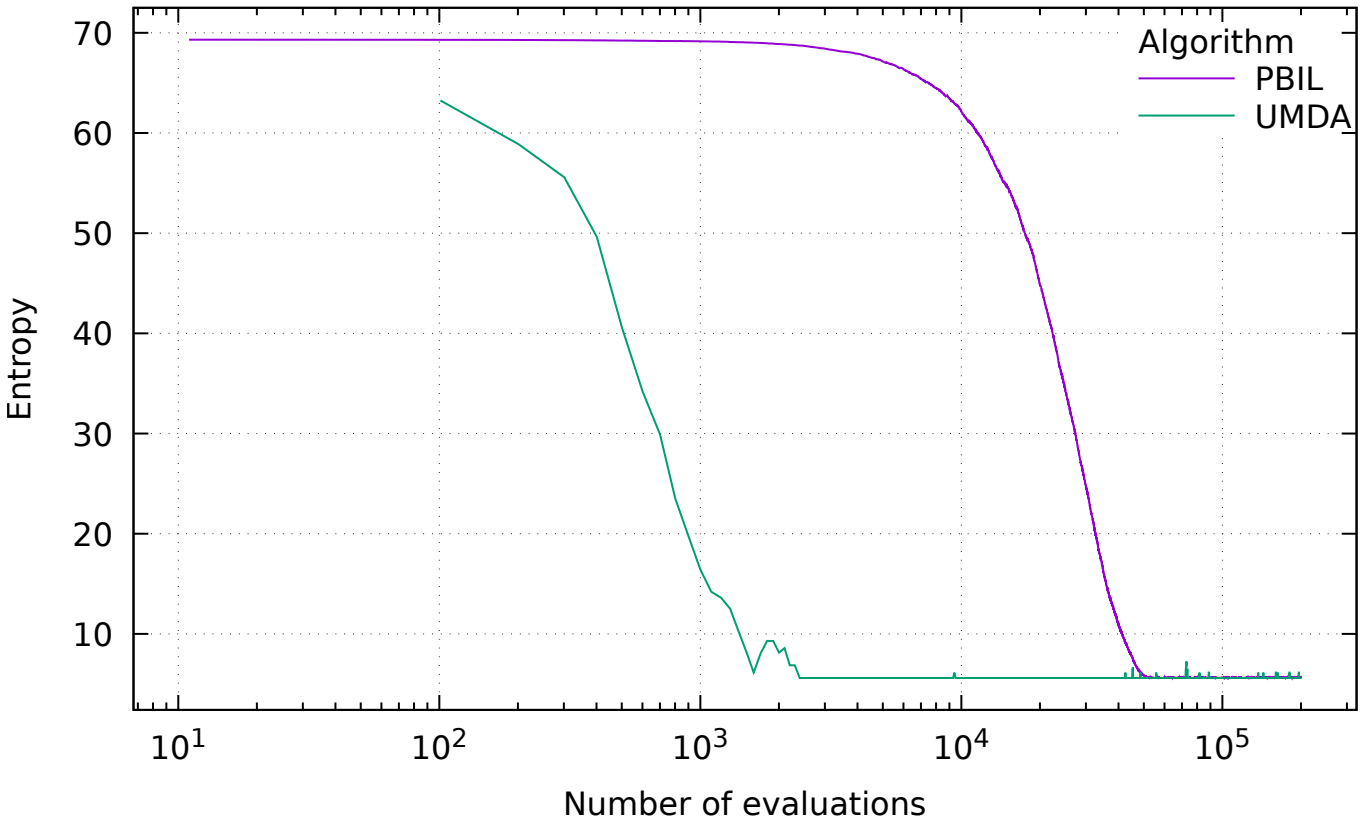
9 Four peaks (5)



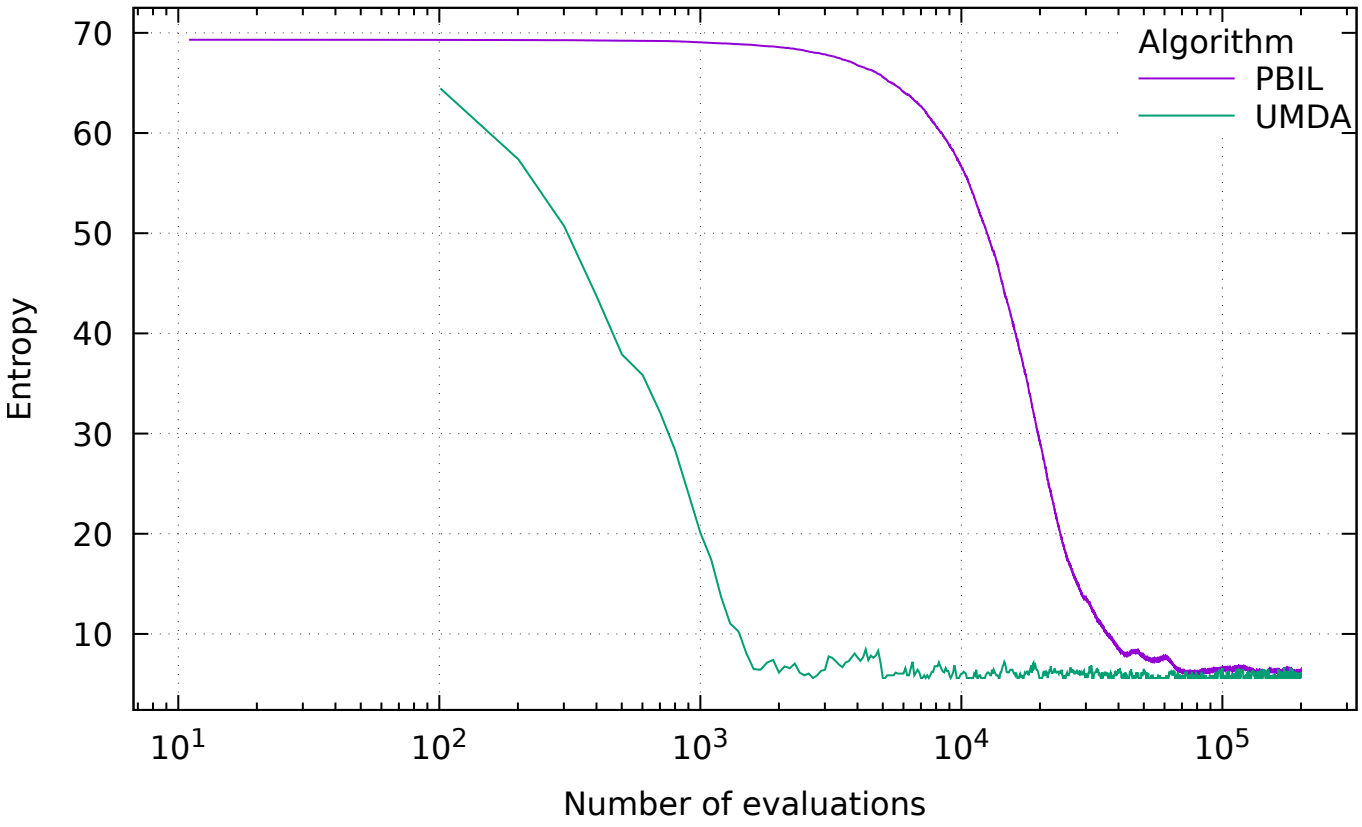
10 Four peaks (5)



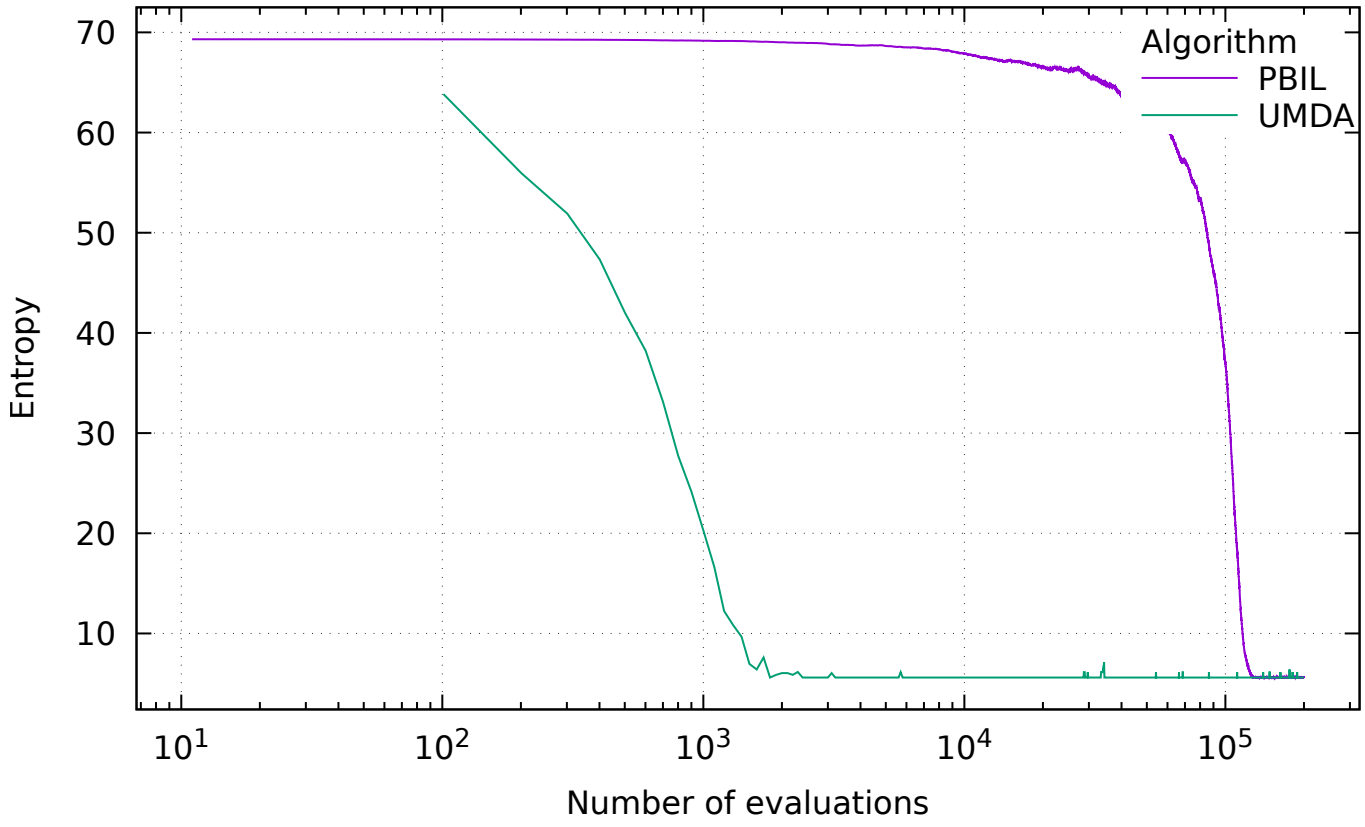
11 Nk landscape



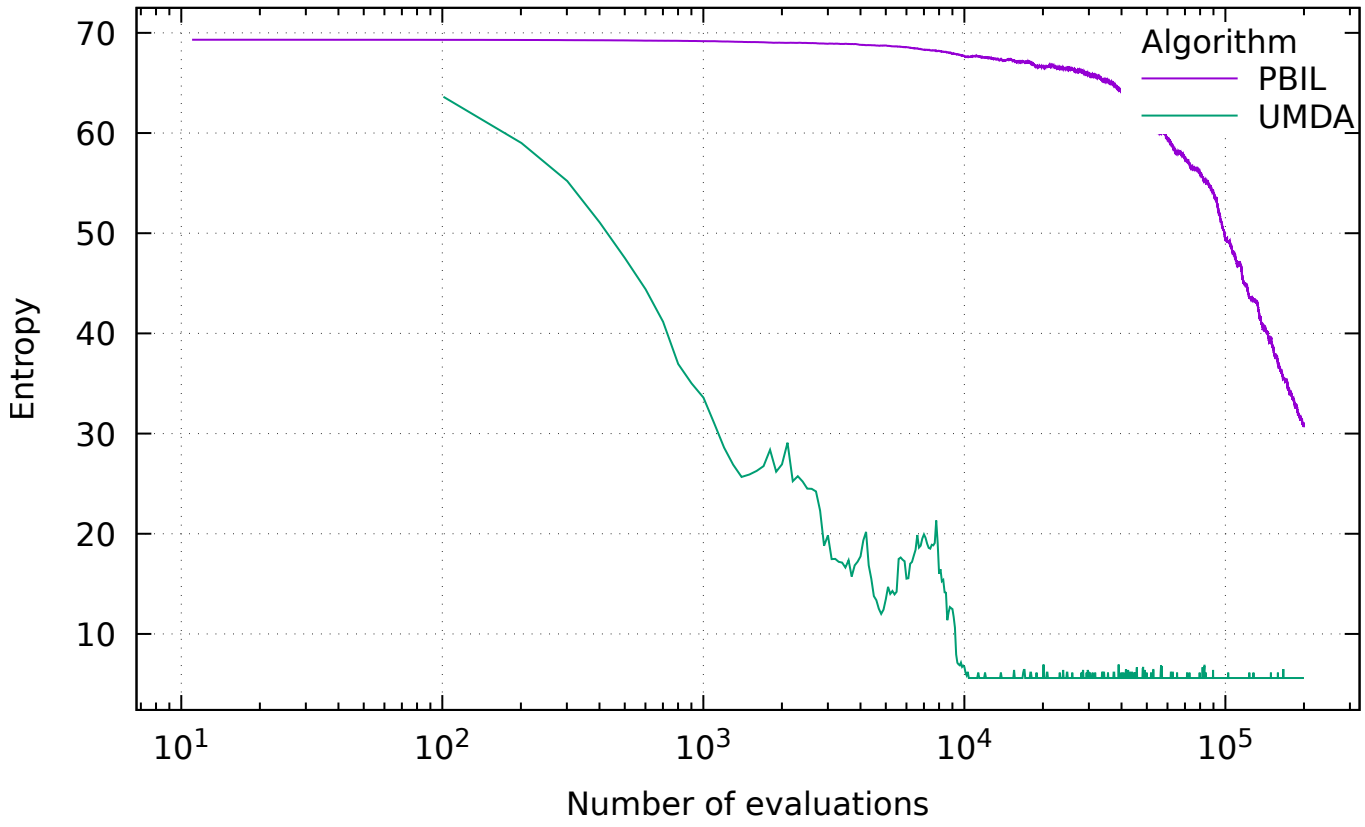
12 MAX-SAT



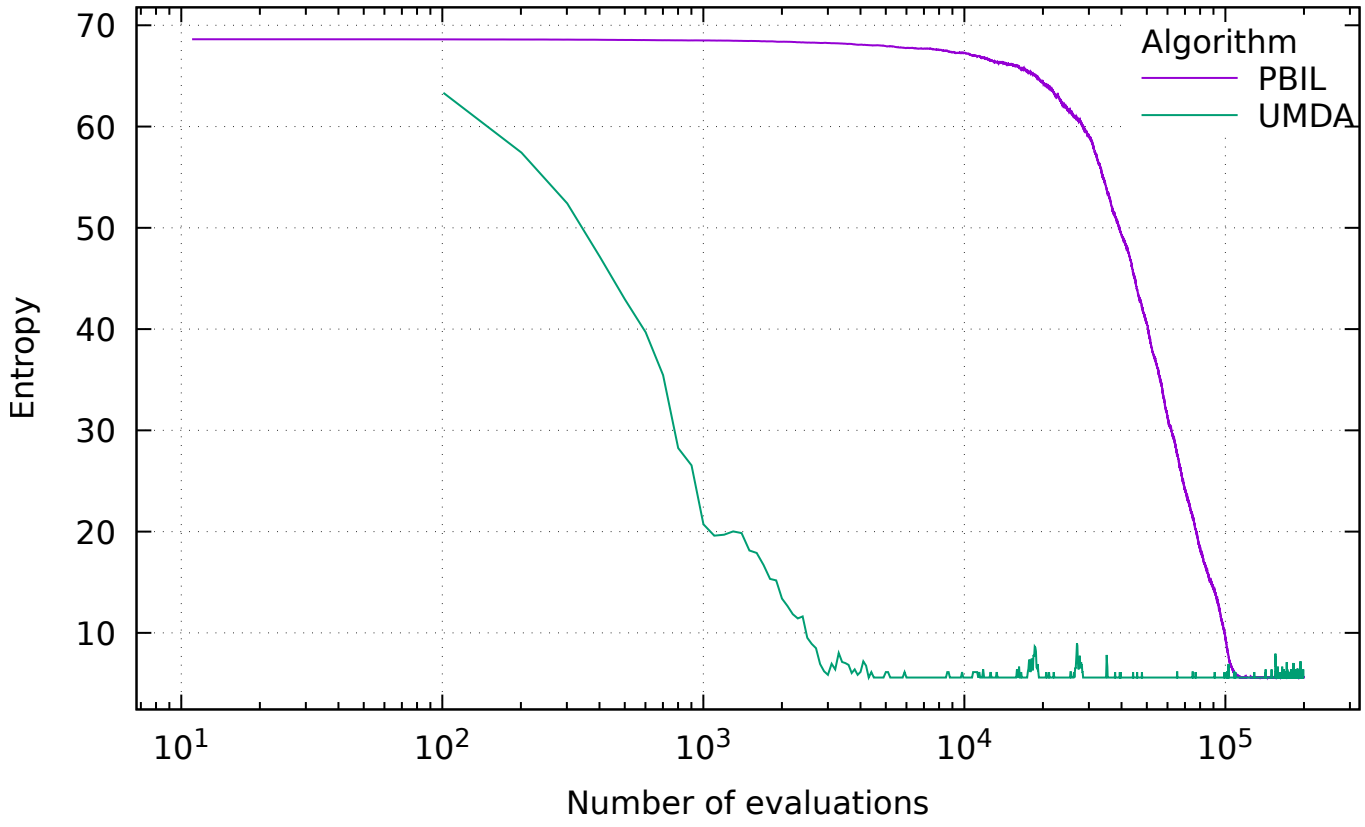
13 LABS



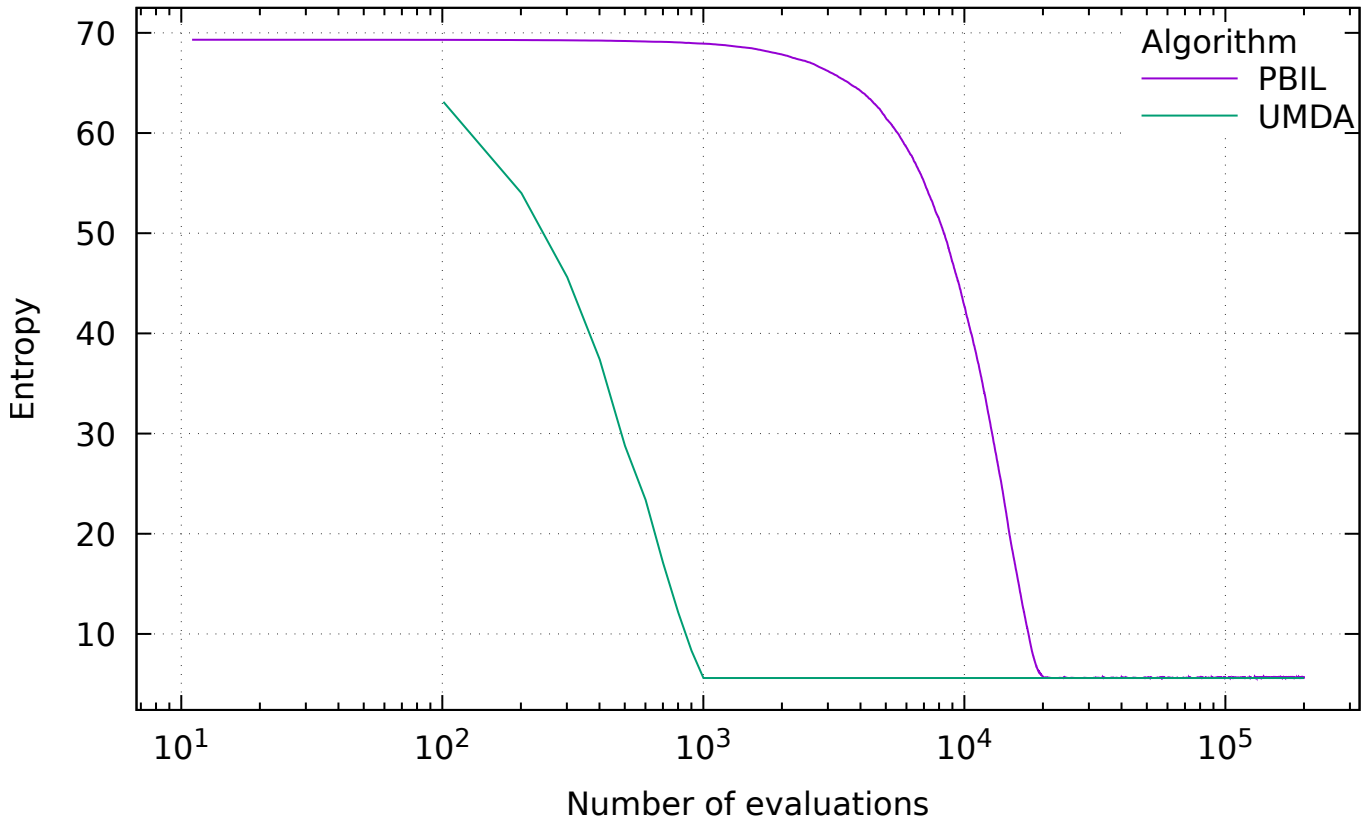
14 Equal Product



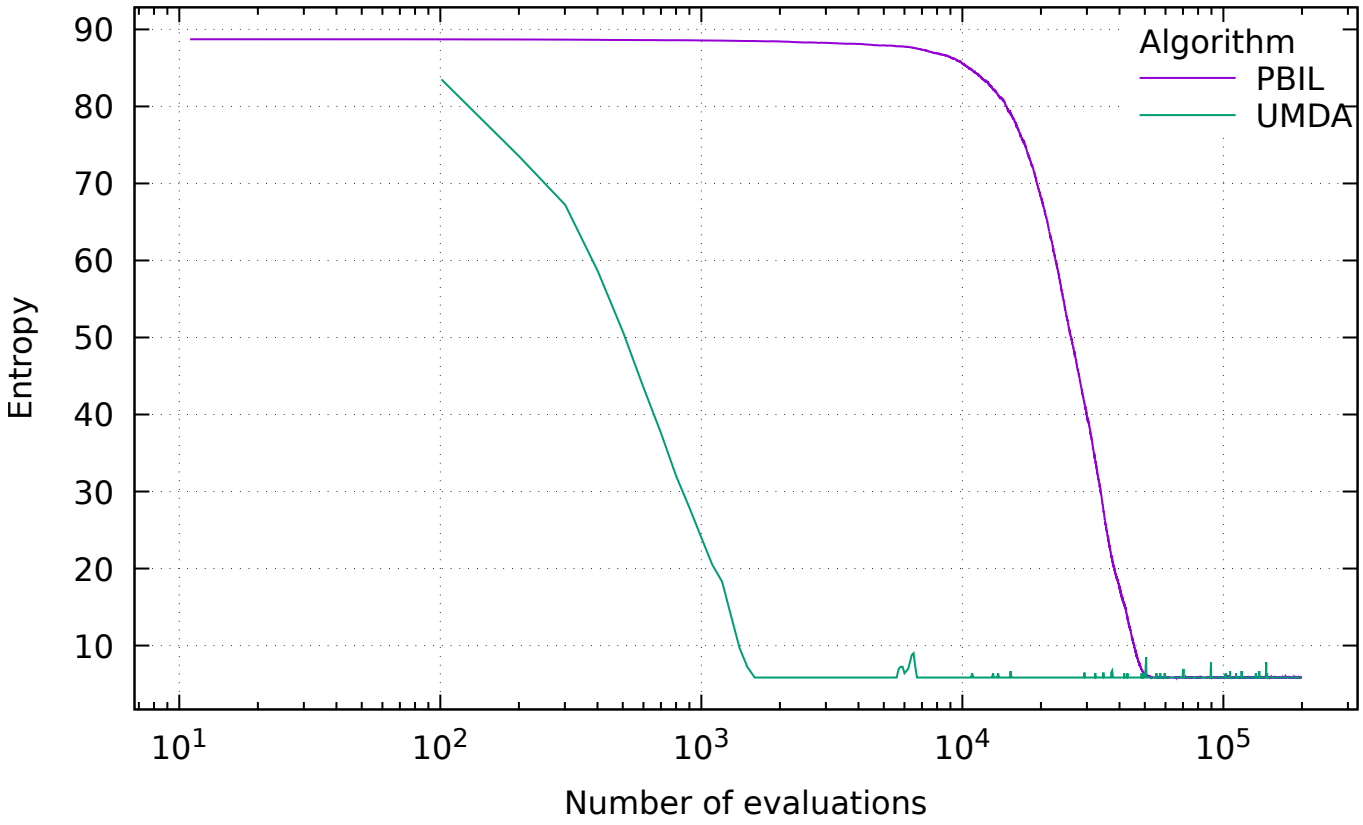
15 Cancellation



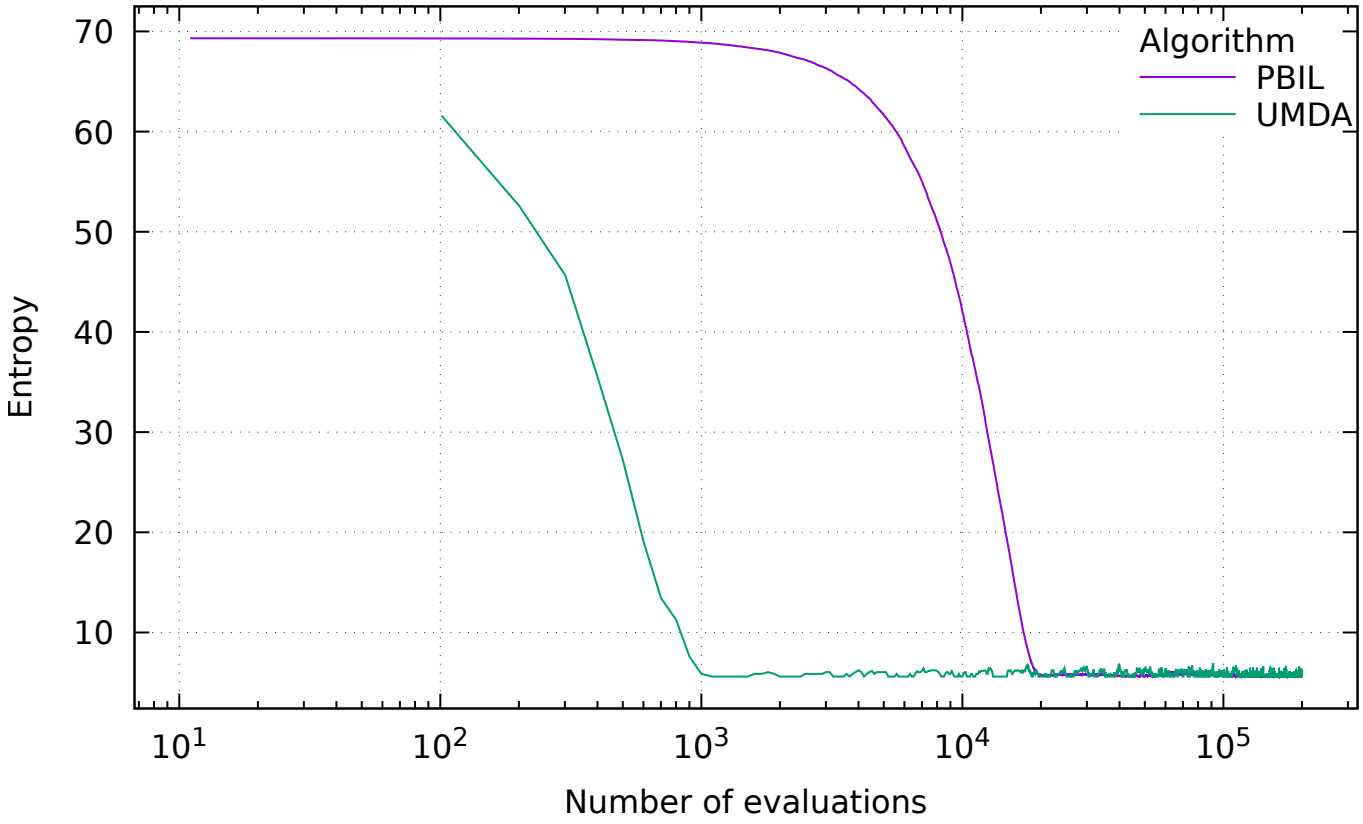
16 Trap



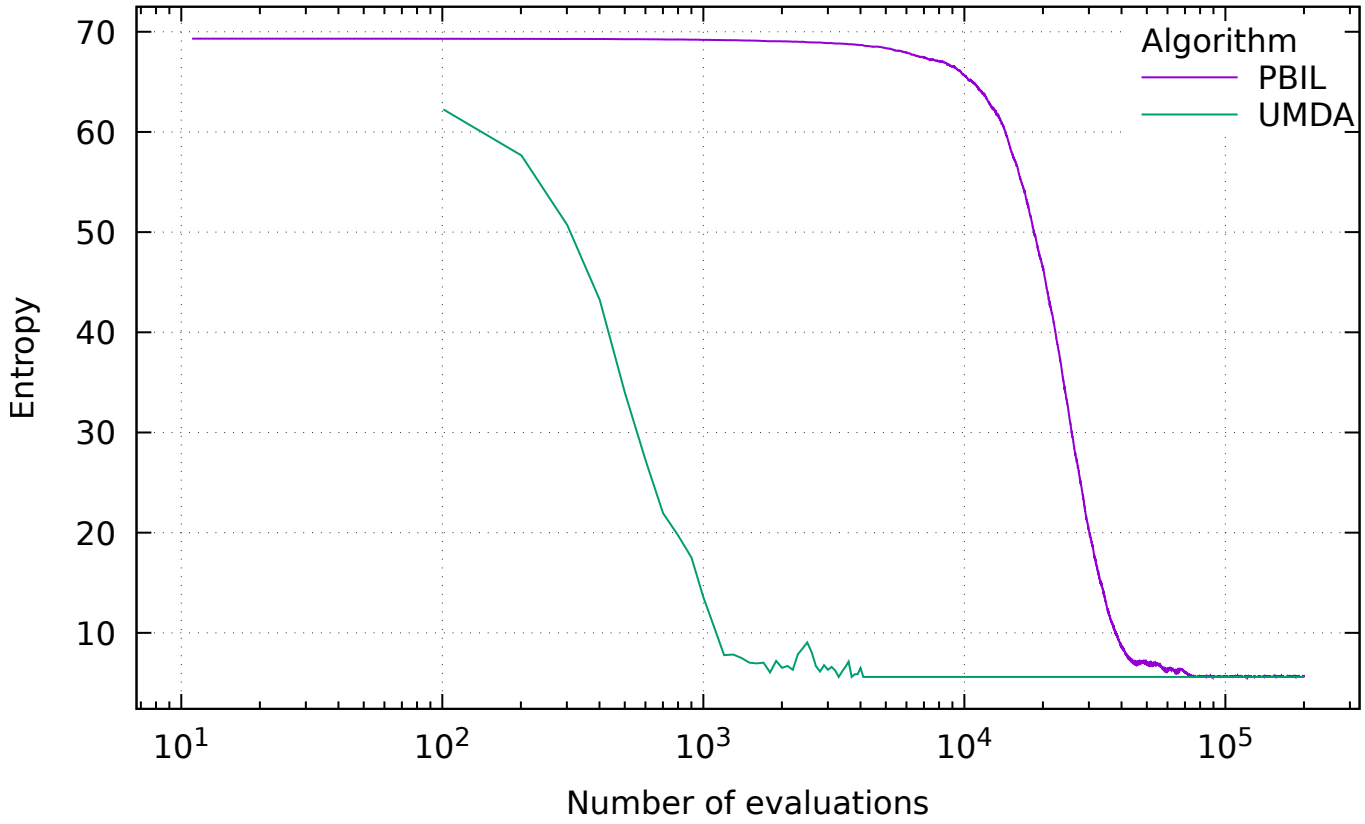
17 H-iff



18 Plateau



19 Walsh (second order)



A Plan

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B Default parameters

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# 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
# description_path = description.txt
# ea_crossover_bias = 0.5
# ea_crossover_probability = 0.5
# ea_lambda = 100
# ea_mu = 10
# ea_mutation_rate = 1
# ea_mutation_rate_max = 1
# ea_mutation_rate_min = 0.01
# ea_success_ratio = 4
# ea_tournament_size = 2
# ea_update_strength = 1.01
# expression = x
# fn_name = noname
# fn_num_traps = 10
# fn_prefix_length = 2
# fn_threshold = 10
# fp_expression = (1-x)^2+100*(y-x^2)^2
# fp_lower_bound = -2
# fp_num_bits = 8
# fp_precision = 0.01
# fp_upper_bound = 2
# function = 0
```

```
# hea_reset_period = 0
# learning_rate = 0.001
# map = 0
# map_input_size = 100
# map_path = map.txt
# map_ts_length = 10
# map_ts_sampling_mode = 0
# neighborhood = 0
# neighborhood_iterator = 0
# noise_stddev = 1
# num_iterations = 0
# num_threads = 1
# path = function.txt
# pn_mutation_rate = 1
# pn_neighborhood = 0
# pn_radius = 2
# population_size = 10
# pv_log_num_components = 5
# radius = 2
# rep_categorical_representation = 0
# rep_num_additional_bits = 2
# results_path = results.json
# rls_patience = 50
# sa_beta_ratio = 1.2
# sa_initial_acceptance_probability = 0.6
# sa_num_transitions = 50
# sa_num_trials = 100
# seed = 0
# selection_size = 1
# solution_path = solution.txt
# target = 100
# last_parameter
# exec_name = unknown
# version = 0.22
# Generated from hnco.json
```