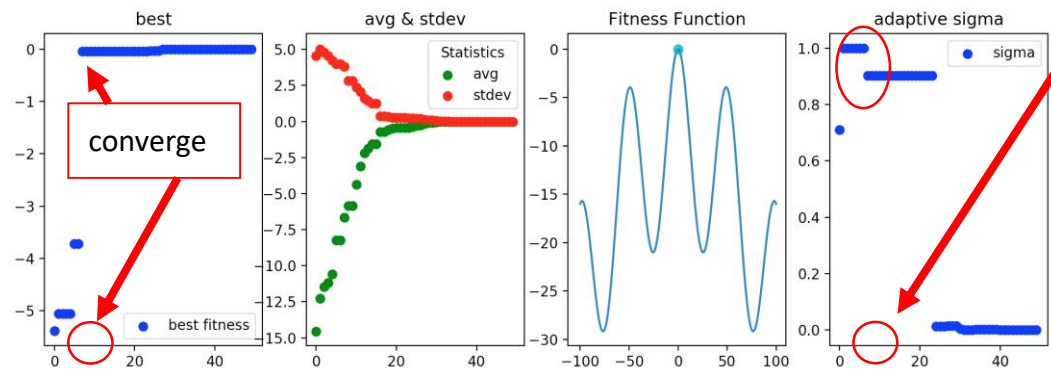I tried 2 configurations on Rastrigin function & 1 config on parabola

(最後繳交的是 population size=10, generation count=50 的 cfg)
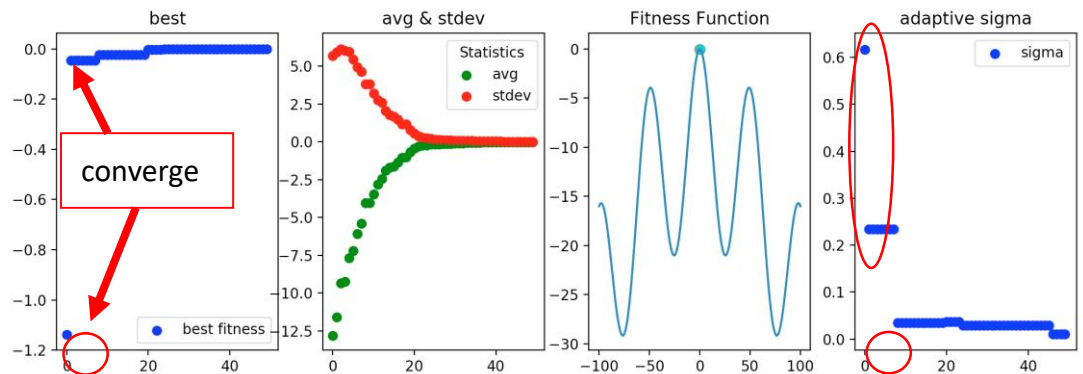
如果格式跑掉，麻煩助教由此打開 pdf 檔：https://bit.ly/EChw5_0416235

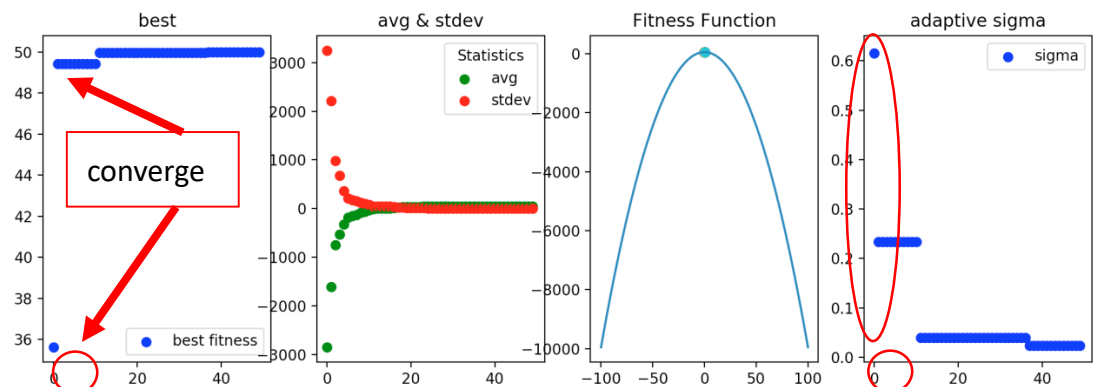0416235 劉昱劭

sigma decreases after converge

population size=10 generation count=50	
population size=20 generation count=50	
population size=20 generation count=50	

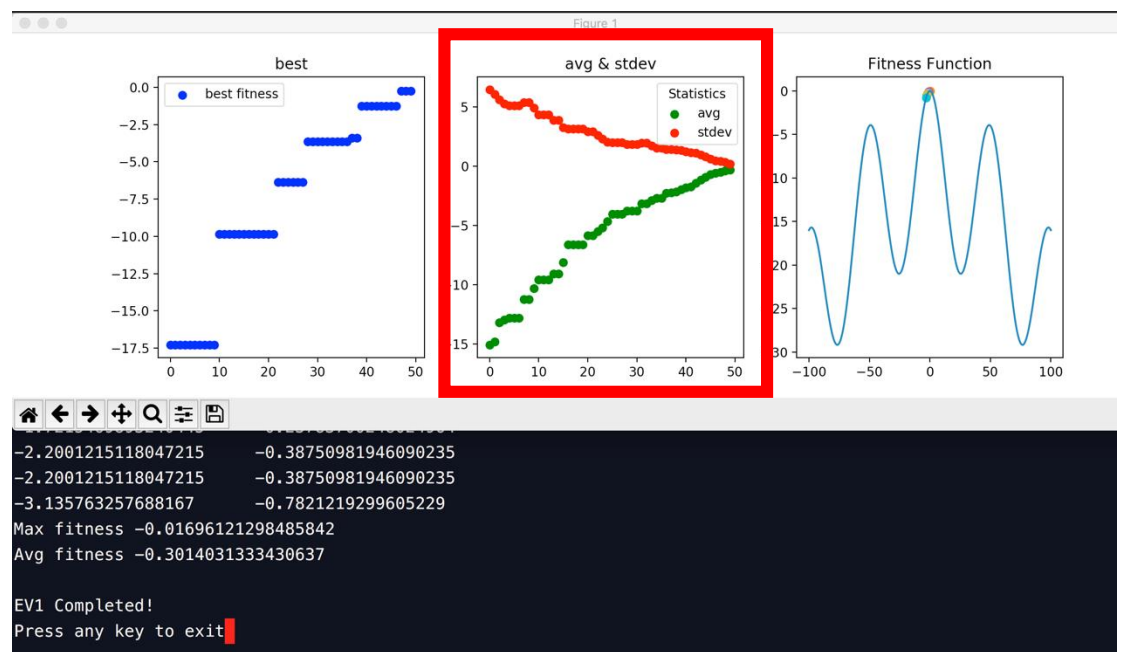We could find that sigma decrease after best fitness value about to converge, and eventually sigma would converge to about zero.
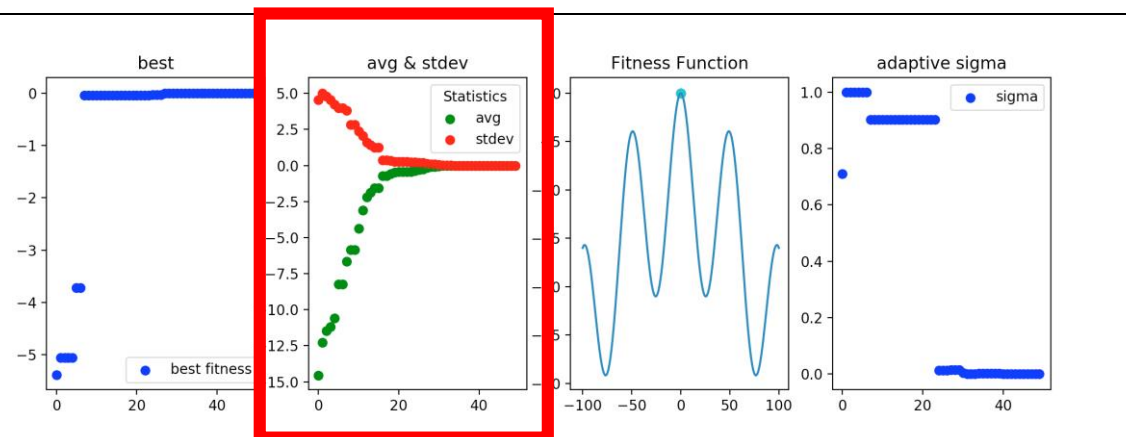
4. compare avg/std of fitness value with hw4 (rastrigin)
Both with same configurations: **population size=10, generation count=50**
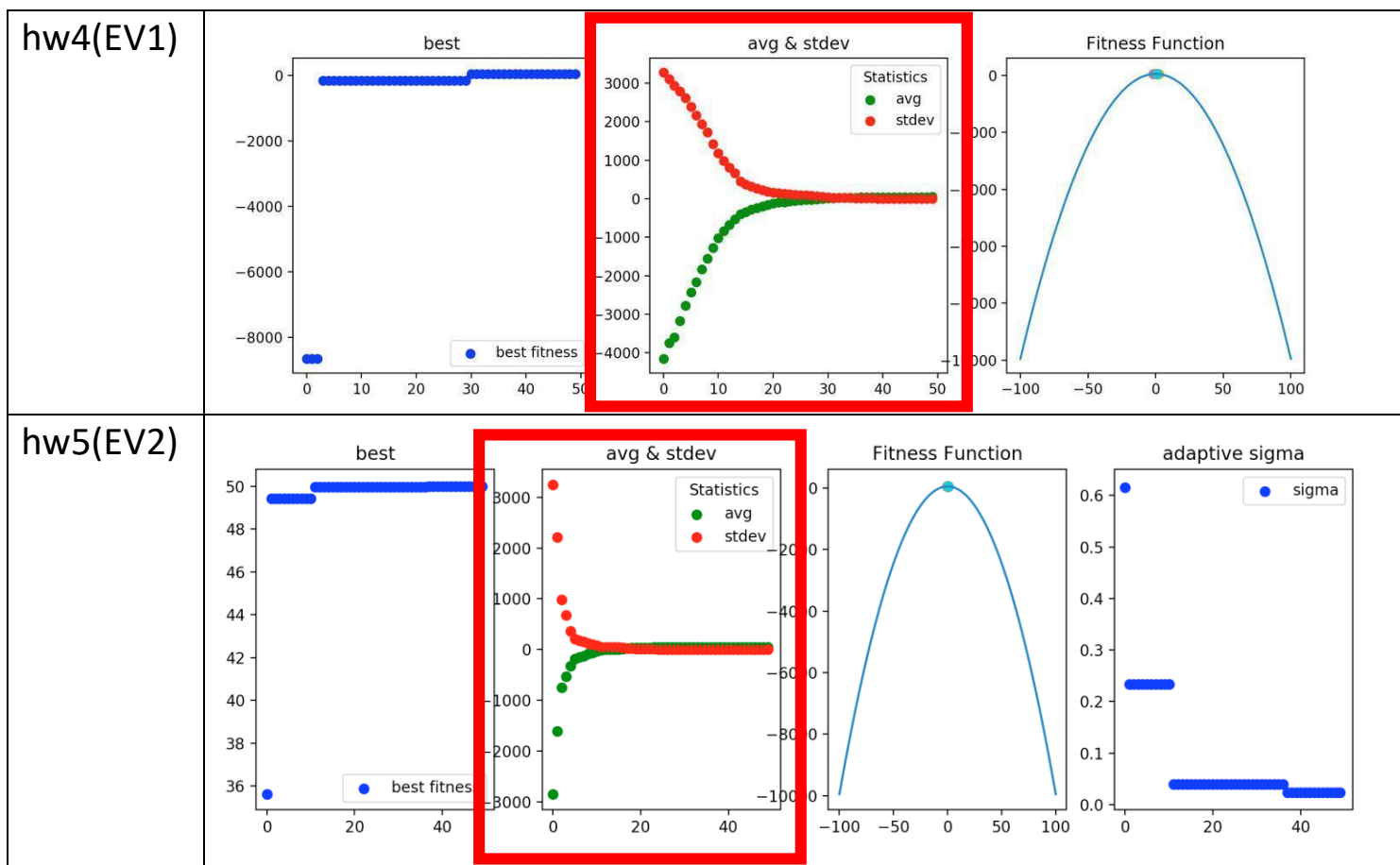
hw4(EV1)	
hw5(EV2)	

EV2 produces more children to replace the worst individual, which cause more "good individuals" appears in the population, so that EV2 could increase the speed of convergence.

Thus, EV2's average & stdev of fitness value converge faster than EV1.

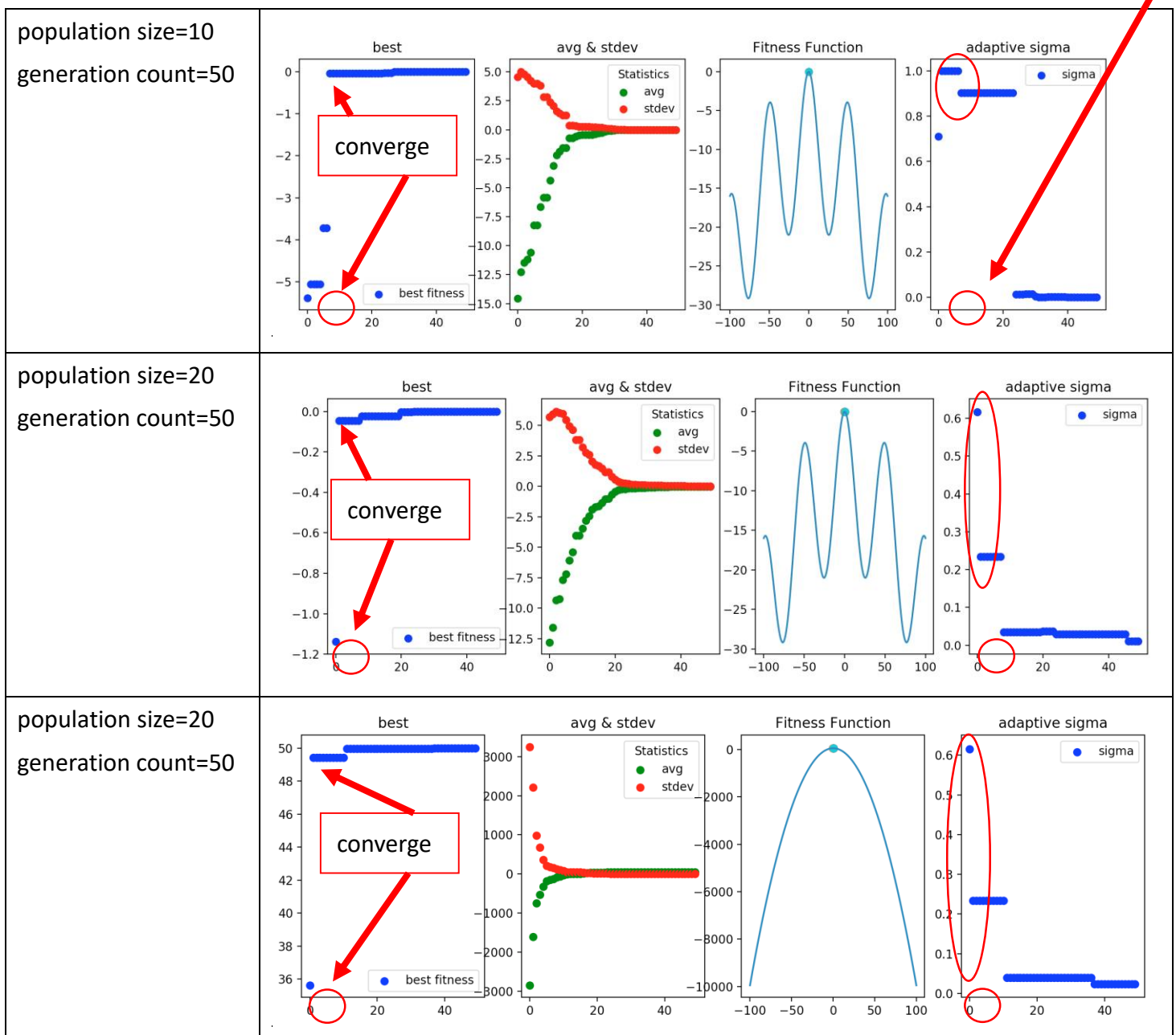## 4. compare avg/std of fitness value with hw4 (parabola)
Both with same configurations: **population size=20, generation count=50**

hw4(EV1)	
hw5(EV2)	

It seems like parabola is too simple so that both EV1 & EV2 converge fast.

5. "adaptive mutation strength vs. generation count"

sigma decreases
after converge

population size=10 generation count=50	
population size=20 generation count=50	
population size=20 generation count=50	

We could find that sigma decrease after best fitness value about to converge, and eventually sigma would converge to about zero.