

Figure 1: Elitist selection where the population is subset down to a factor P from which the next generation is mutated. This form of selection is often considered naive and can lead to early convergence when used exclusively for selection.

(cartos)

## Algorithm 1: Tournament Selection Algorithm

Data: Samples size S, number of iterations C

```
for i = 1 to C do
```

while ||sample|| < S do

| sample  $\leftarrow$  random element from population;

end

 $parent \leftarrow \text{best evaluation score in } sample;$ 

 $of\!f\!spring \leftarrow \text{MUTATE}(parent);$ 

 $population \leftarrow \texttt{TRAINANDEVALUATE}(\textit{offspring});$ 

remove worst evaluation score in sample from population;

end

Return best evaluation score in population;