

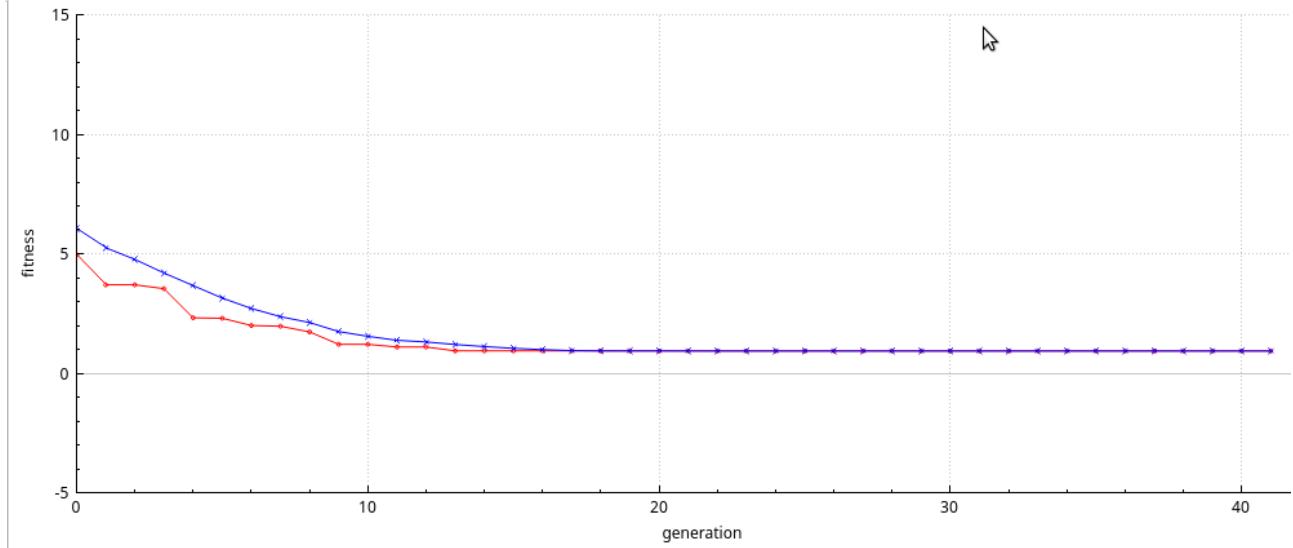
Alexeuk Pavel.

20D function  $y = x_1^2 + x_2^2 + \dots + x_{20}^2$ .

Amount of chromosomes is 20;

Amount of genes is 20;

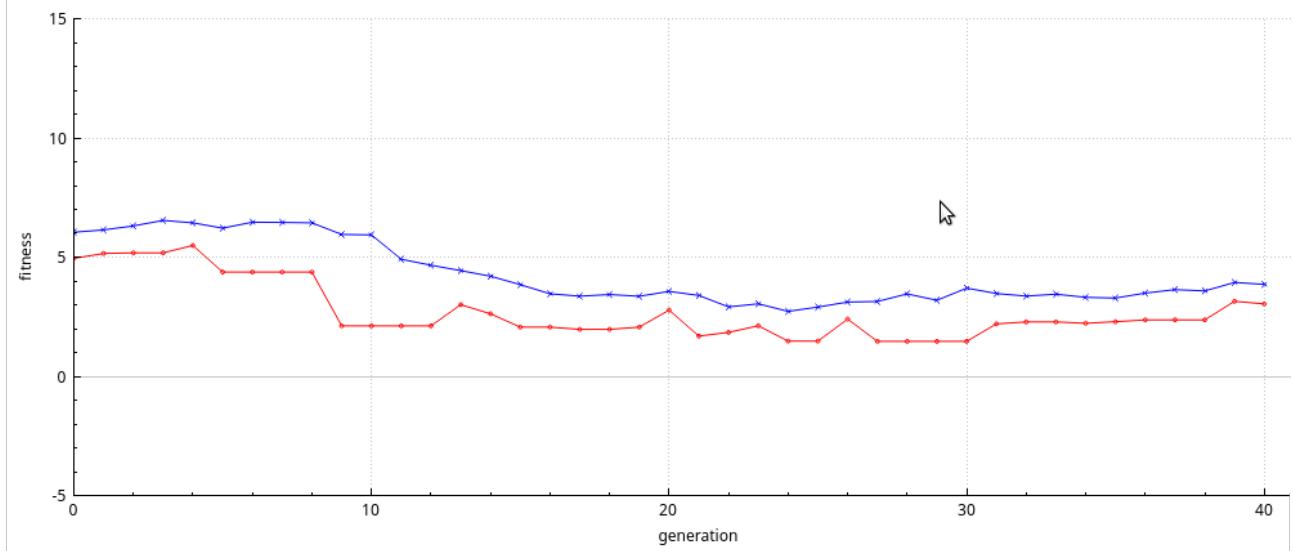
20D function. Graph Uniform crossover method without mutation:



Red — best chromosomes.

Blue — average chromosomes.

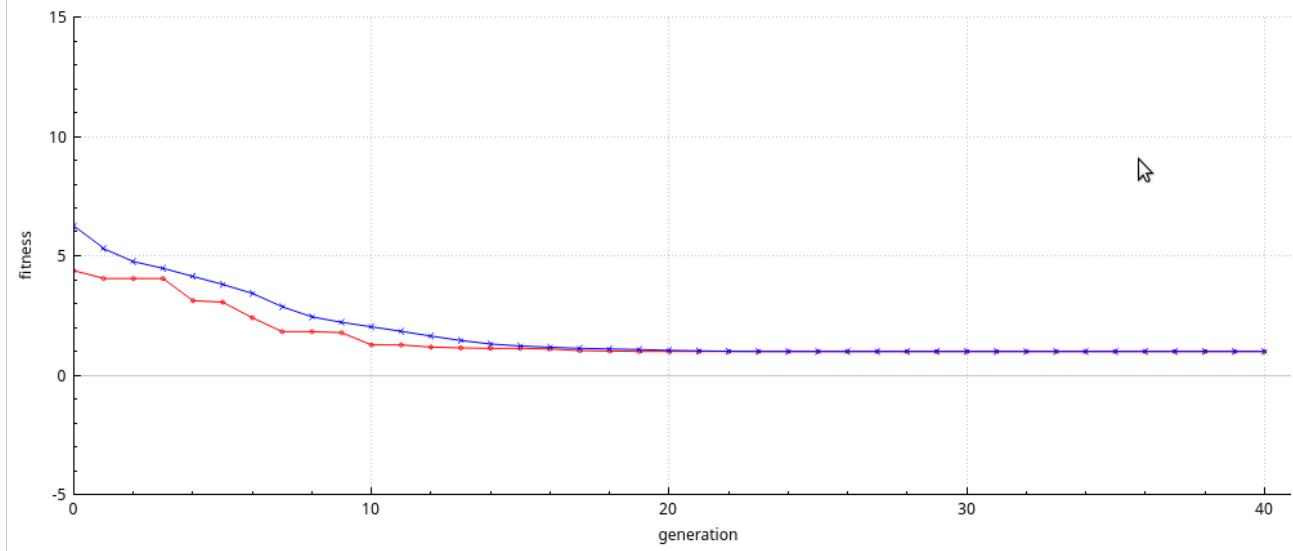
20D function. Uniform crossover method with mutation 5%:



Red — best chromosomes.

Blue — average chromosomes.

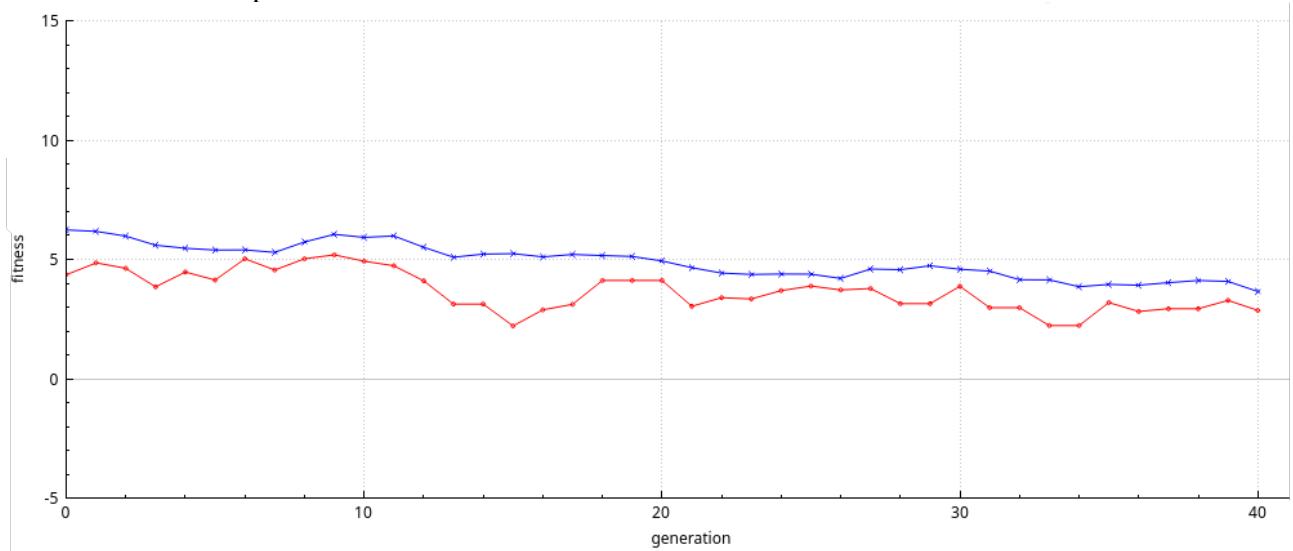
#### 20D. One Point crossover method without mutation:



Red — best chromosomes.

Blue — average chromosomes.

#### 20D function. One point method with mutation 5%.



Red — best chromosomes.

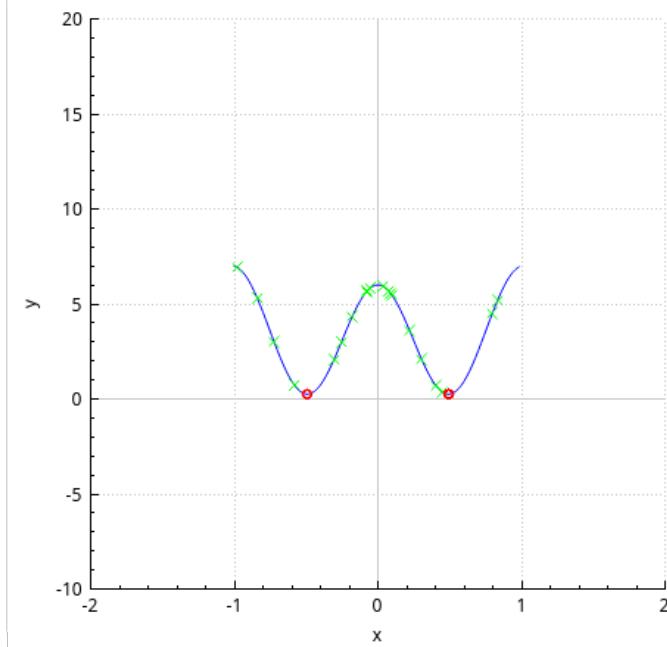
Blue — average chromosomes.

2D function function  $y = 3 + x^2 + 3 * \cos(2 * 3.14 * x)$ .

Amount of chromosomes is 20.

Amount of genes is 20.

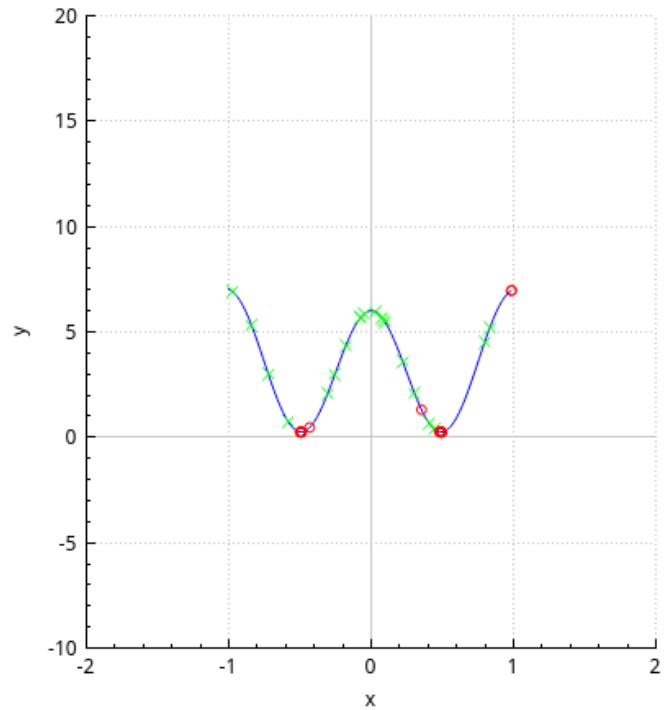
Uniform crossover method without mutation. 10 generations.



Red circles is the latest generation;

green crosses is first generation;

2D function. Uniform crossover method with mutation 5%. 10 generations.



Red circles is the latest generation;

green crosses is first generation;