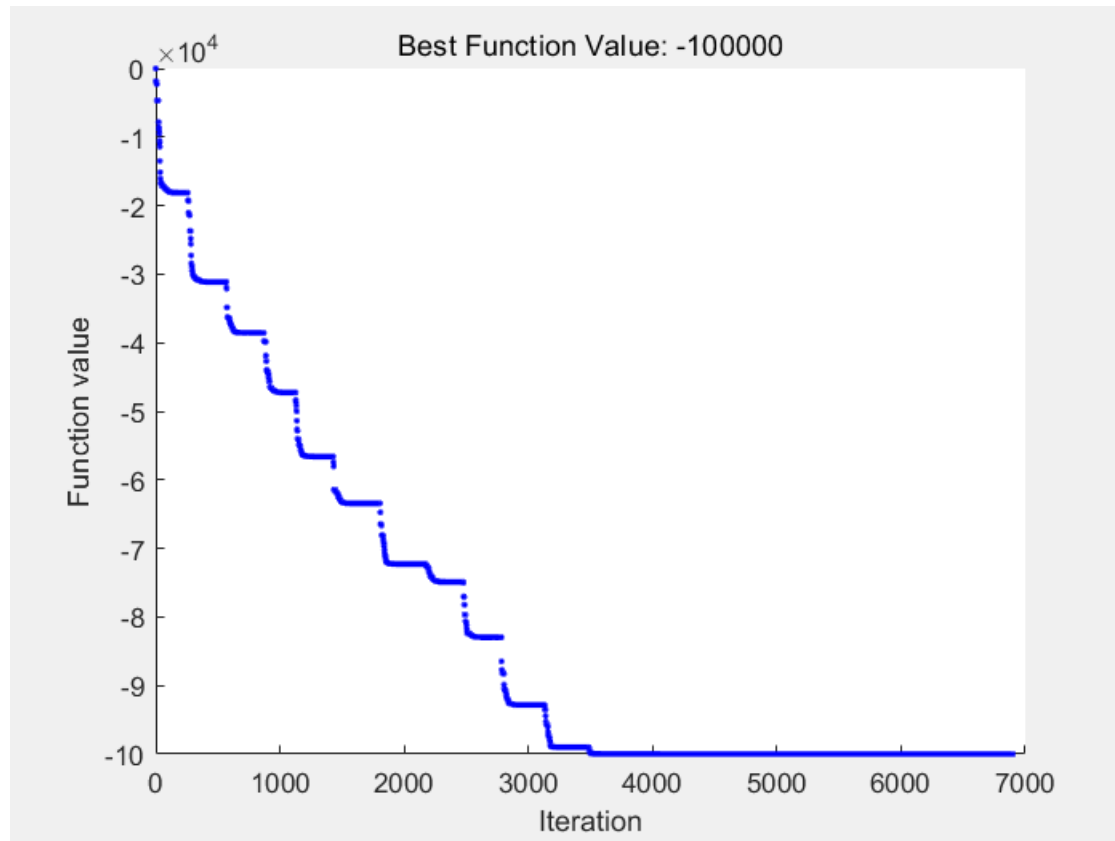# 模拟退火

```
x0 = [1 1 1];
x_lb = [0 0 0];
x_ub = [100 100 1000];
options = optimoptions("simulannealbnd","PlotFcn","saplotbestf");

[x, fval, exitflag, output] = simulannealbnd(@Obj_fun, x0, x_lb, x_ub, options);
```


Optimization terminated: change in best function value less than options.FunctionTolerance.

```
x, fval
```

x = 1×3
10^3 ×
    0.0000   0.1000   1.0000
fval = -100000

函数定义

```
function y = Obj_fun(x)
    y = x(1)^2 - x(2)*x(3);
end
```