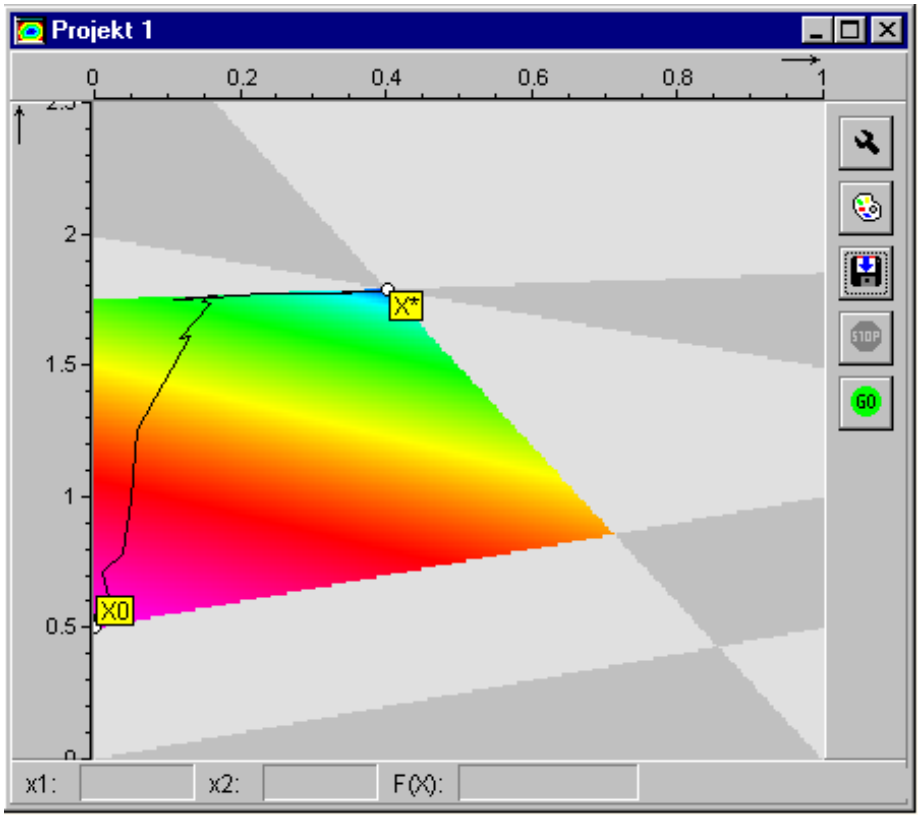
Lineare Optimierung

$$F(X) = -2x_1 - 3x_2 - x_3 := \text{Min!}$$

$$g_1(X) = x_1 + 2x_2 + x_3 - 15 \le 0$$
$$g_2(X) = x_1 + 2x_2 + 3x_3 - 10 \le 0$$
$$g_3(X) = 3x_1 + x_2 + x_3 - 5 \le 0$$
$$g_4(X) = 2x_1 - x_2 + 2x_3 - 12 \le 0$$
$$g_5(X) = 0{,}5x_1 - x_2 + 0{,}5 \le 0$$
$$g_6(X) = -0{,}1x_1 + x_2 - 1{,}75 \le 0$$
$$g_7(X) = 0{,}5x_1 - x_2 \le 0$$
$$g_8(X) = x_1 - 1 \le 0$$
$$g_9(X) = x_2 - 2{,}5 \le 0$$
$$g_{10}(X) = x_3 - 2{,}5 \le 0$$



Ergebnisse

$x_1 = 0{,}4;\ x_2 = 1{,}79;\ x_3 = 2$

$F(X^*) = -8{,}179$