

Figure 1: Quadratic concave function  $C_1(x_1, x_2)$ .

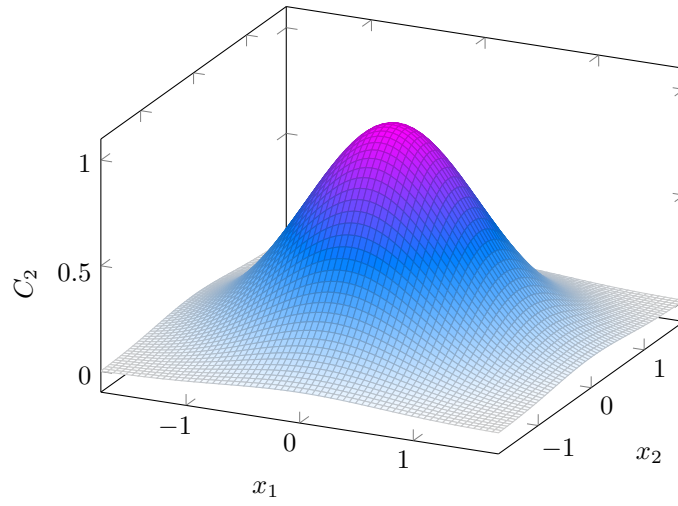


Figure 2: Two variable Gaussian function  $C_2(x_1, x_2)$ .

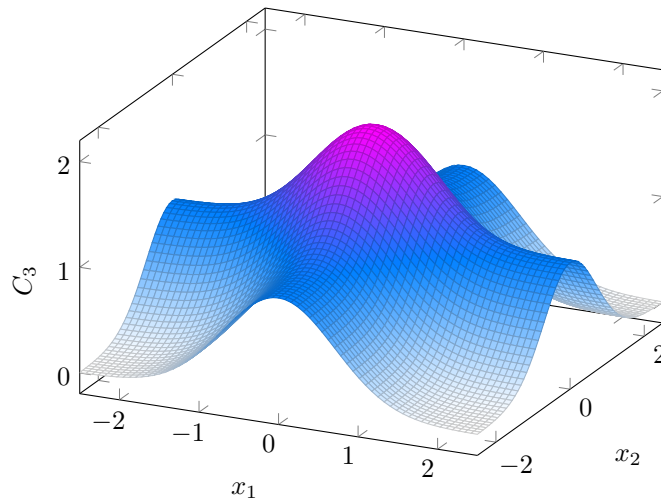


Figure 3: Modified version of Gaussian function  $C_3(x_1, x_2)$ .

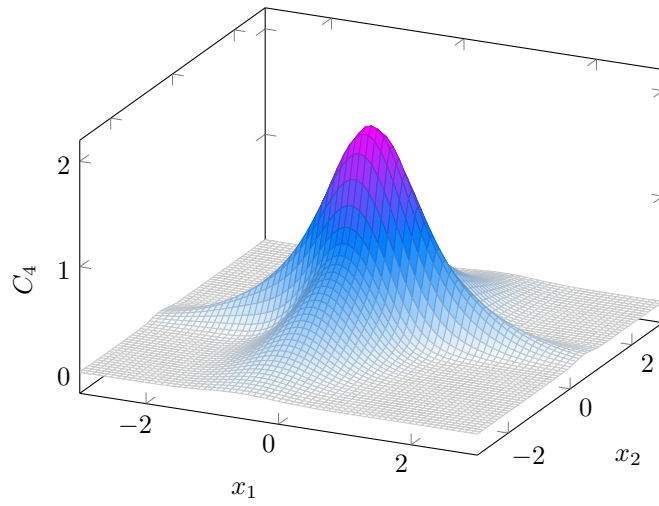


Figure 4: The proposed function  $C_4(x_1, x_2)$  for  $a = 0.49$ .

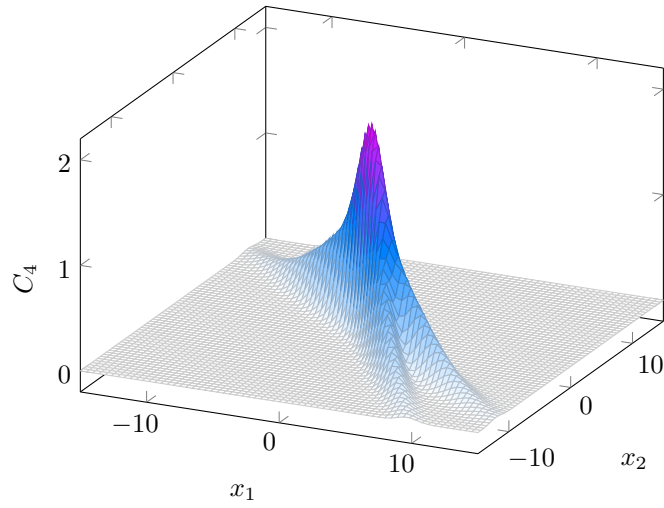
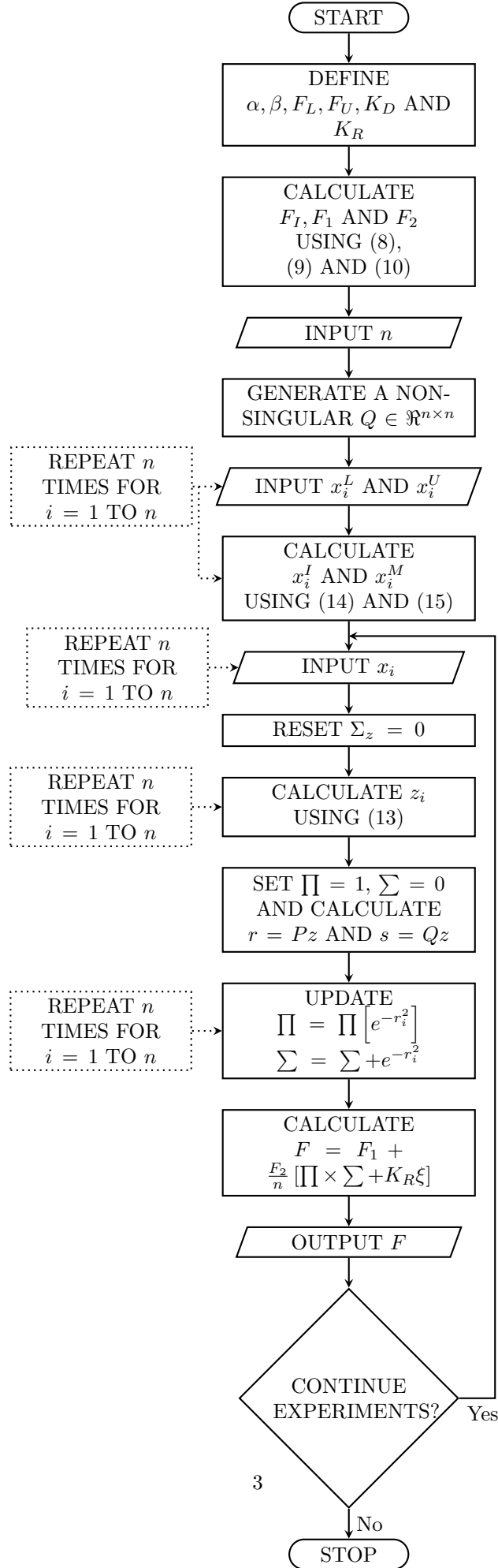


Figure 5: The proposed function  $C_4(x_1, x_2)$  for  $a = 0.49$ .



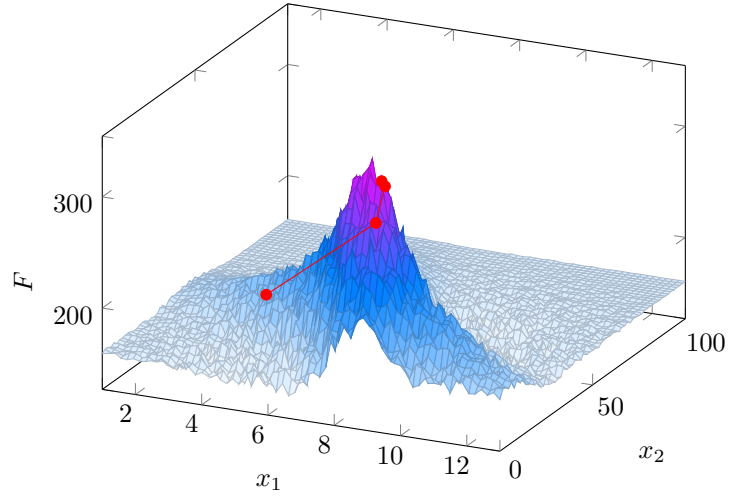


Figure 7: The proposed function  $C_4(x_1, x_2)$  for  $a = 0.49$ .

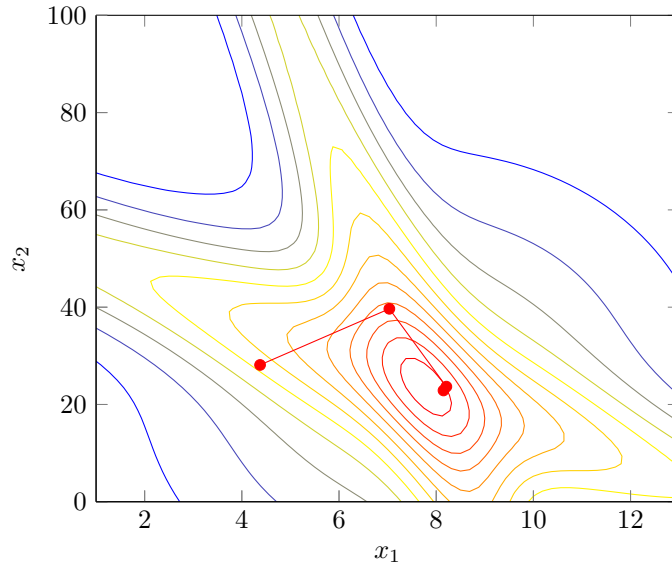


Figure 8: Contour plot of  $F$  with the constants given in Section ?? superimposed with the RSM results.

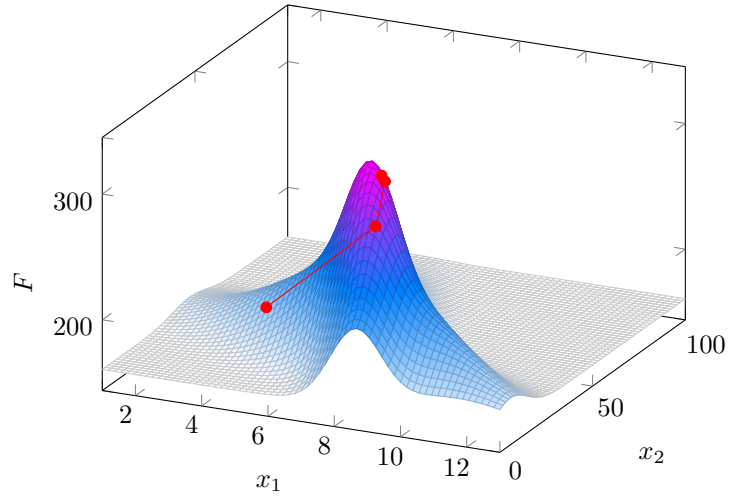


Figure 9: The proposed function  $C_4(x_1, x_2)$  for  $a = 0.49$ .

<https://skgadi.com/tools/multifactorial-experiment-simulator/>

Figure 10: The proposed function  $C_4(x_1, x_2)$  for  $a = 0.49$ .