

Optimization – Laboratory 8

Rosenbrock method

The function in Section 5.3 is given by the number in column **P7** from the status.

For α and β it is preferred that they are chosen such that $\alpha\beta \neq 1$. The initial directions can be considered the directions of the coordinate axes.

Requirements:

- Calculate on paper for *Rosenbrock method* until it reaches oscillation. Compute the new directions.
- Draw the starting point, for each success draw a line to the new point obtained and if it is a failure put x. When the oscillation is reached, draw the new directions obtained.
- Implement in MATLAB *Rosenbrock method* and draw the lines when a step over the contour of the function was successful.
- Compare the results to those obtained by the Nelder-Mead method.