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## Implementation of a Parallel Simplex Algorithm

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The Nelder-Mead method or Simplex algorithm was proposed in 1965 by John Nelder and Roger Mead. It is widely used to find minimum values of specific functions in Mathematics and Physics. We implemented a framework for minimization algorithm

in C++ based on the non-parallel Simplex scheme and a parallel adaptation. For the parallel simplex algorithm, we used the Message Passing Interface (MPI) which is a C language library for parallel programming. We show that this parallel Simplex method yields a higher computational efficiency than the non-parallel Simplex algorithm.

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