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"Moving grids for hyperbolic problems"

In the first part of our presentation we consider a few algorithms for minimizing error functionals by means of redistribution of mesh points. We shall show that in 1D case the conditions for extrema result in the principle of the error equidistribution. Further, assuming that the exact data are available only on initial grid, we shall study effects of numerical interpolation.

The second part is devoted to discussion the results of numerical experiments for 1D test hyperbolic problems. The special attention will be paid to efficiency of our algorithms.