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"Métodos Hopmoc para Resolução de Equações de Convecção-Difusão e sua Implementação Paralela"

Among the existing methods for the convection-difusion equation, one can cite the Hopscotch method, which is conditinally stable, and the Modified Method of Characteristics, which is difficult for paralelization because it solves a linear sistem for all mesh points. This dissertation presents the Group Hopmoc methods as a generalization of the Hopmoc method, proposed recently. This type of method is stable, may be easily implemented in a parallel environment and has linear speedup as the number of points is increased.