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**Analysis and computation of adaptive moving grids by deformation.** (English) Zbl 0856.65109  
*Numer. Methods Partial Differ. Equations* 12, No. 4, 489-506 (1996).

The authors develop and analyse a numerical method for creating an adaptive moving grid in one, two and three dimensions. The algorithm is developed for theoretical foundation. Finally a numerical implementation of the method is made using a Runge-Kutta scheme. Results of several experiments are presented and one result among other things indicates that the method accurately redistributes the nodes and does not tangle the mean.

Reviewer: [P.K.Mahanti \(Ranchi\)](#)

**MSC:**

**65M50** Mesh generation, refinement, and adaptive methods for the numerical solution of initial value and initial-boundary value problems involving PDEs

Cited in **2** Reviews  
Cited in **17** Documents

**Keywords:**

[numerical examples](#); [adaptive moving grid](#); [Runge-Kutta scheme](#)

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