

Application of Beltrami equations to generation of spatial adaptive grids

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The paper presents recent results related to the development of algorithms and codes for generating both structured and unstructured adaptive spatial grids with the use of the inverted Beltrami equations. An original description of the method was given in the monograph: V.D. Liseikin "A Computational Differential Geometry Approach to Grid Generation", 2004, Berlin, Springer.

Control of grid properties is performed by metrics introduced in the physical geometry under consideration. Applications of the algorithms developed to some applied problems are demonstrated.

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