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of Linear Convection-Diffusion Problems in Two Dimensions with Regular Boundary Layers; 13. Convergence of Fitted Mesh Finite Difference Methods for Linear Convection-Diffusion Problems in Two Dimensions with Regular Boundary Layers; 14. Limitations of Fitted Operator Methods on Uniform Rectangular Meshes for Problems with Parabolic Boundary Layers  
15. Fitted Numerical Methods for Problems with Initial and Parabolic Boundary Layers  
Appendix A Some a priori Bounds for Differential Equations in Two Dimensions; Bibliography; Index

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Sommario/riassunto

Since the first edition of this book, the literature on fitted mesh methods for singularly perturbed problems has expanded significantly. Over the intervening years, fitted meshes have been shown to be effective for an extensive set of singularly perturbed partial differential equations. In the revised version of this book, the reader will find an introduction to the basic theory associated with fitted numerical methods for singularly perturbed differential equations. Fitted mesh methods focus on the appropriate distribution of the mesh points for singularly perturbed problems. The global error

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