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Sommario/riassunto	In this book we gather recent mathematical developments and engineering applications of Trefftz methods, with particular emphasis on the Method of Fundamental Solutions (MFS). These are true meshless methods that have the advantage of avoiding the need to set

up a mesh altogether, and therefore going beyond the reduction of the mesh to a boundary. These Trefftz methods have advantages in several engineering applications, for instance in inverse problems where the domain is unknown and some numerical methods would require a remeshing approach. Trefftz methods are also known to perform very well with regular domains and regular data in boundary value problems, achieving exponential convergence. On the other hand, they may also under certain conditions, exhibit instabilities and lead to ill-conditioned systems. This book is divided into ten chapters that illustrate recent advances in Trefftz methods and their application to engineering problems. The first eight chapters are devoted to the MFS and variants whereas the last two chapters are devoted to related meshless engineering applications. Part of these selected contributions were presented in the 9th International Conference on Trefftz Methods and 5th International Conference on the MFS, held in 2019, July 29-31, in Lisbon, Portugal.