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Titolo	An Invitation to the Theory of the Hybridizable Discontinuous Galerkin Method : Projections, Estimates, Tools / / by Shukai Du, Francisco-Javier Sayas
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Nota di contenuto	Getting ready -- Projection analysis of mixed methods -- The Hybridizable Discontinuous Galerkin method -- Variants of the HDG method -- HDG methods for evolutionary equations -- Further reading. .
Sommario/riassunto	This monograph requires basic knowledge of the variational theory of elliptic PDE and the techniques used for the analysis of the Finite Element Method. However, all the tools for the analysis of FEM (scaling arguments, finite dimensional estimates in the reference configuration, Piola transforms) are carefully introduced before being used, so that the reader does not need to go over longforgotten textbooks. Readers include: computational mathematicians, numerical analysts, engineers and scientists interested in new and computationally competitive Discontinuous Galerkin methods. The intended audience includes graduate students in computational mathematics, physics, and engineering, since the prerequisites are quite basic for a second year graduate student who has already taken a non necessarily advanced class in the Finite Element method.