Título:

Autor: **Precio:** $624.38

Editorial: **Año:** 2010

Tema: **Edición:** 1ª

Sinopsis   **ISBN:** 9783034604765

The goal of this book is to investigate the behavior of weak solutions of the elliptic transmission problem in a neighborhood of boundary singularities: angular and conic points or edges. This problem is discussed for both linear and quasilinear equations. A principal new feature of this book is the consideration of our estimates of weak solutions of the transmission problem for linear elliptic equations with minimal smooth coeciffients in n-dimensional conic domains. Only few works are devoted to the transmission problem for quasilinear elliptic equations. Therefore, we investigate the weak solutions for general divergence quasilinear elliptic second-order equations in n-dimensional conic domains or in domains with edges. The basis of the present work is the method of integro-differential inequalities. Such inequalities with exact estimating constants allow us to establish possible or best possible estimates of solutions to boundary value problems for elliptic equations near singularities on the boundary. A new Friedrichs-Wirtinger type inequality is proved and applied to the investigation of the behavior of weak solutions of the transmission problem. All results are given with complete proofs. The book will be of interest to graduate students and specialists in elliptic boundary value problems and applications.