

1. Record Nr.	UNINA9910817273903321
Autore	Meziani Abdelhamid <1957->
Titolo	On first and second order planar elliptic equations with degeneracies / / Abdelhamid Meziani
Pubbl/distr/stampa	Providence, Rhode Island : , : American Mathematical Society, , 2011 ©2011
ISBN	0-8218-8750-5
Descrizione fisica	1 online resource (77 p.)
Collana	Memoirs of the American Mathematical Society, , 0065-9266 ; ; Volume 217, Number 1019
Disciplina	515/.3533
Soggetti	Degenerate differential equations Differential equations, Elliptic
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"May 2012, Volume 217, Number 1019 (first of 4 numbers)."
Nota di bibliografia	Includes bibliographical references.
Nota di contenuto	<p>""Contents""; ""Introduction""; ""Chapter 1. Preliminaries""; ""Chapter 2. Basic Solutions""; ""2.1. Properties of basic solutions""; ""2.2. The spectral equation and Spec(L0)""; ""2.3. Existence of basic solutions""; ""2.4. Properties of the fundamental matrix of (E,)""; ""2.5. The system of equations for the adjoint operator L*""; ""2.6. Continuation of a simple spectral value""; ""2.7. Continuation of a double spectral value""; ""2.8. Purely imaginary spectral value""; ""2.9. Main result about basic solutions""; ""Chapter 3. Example""</p> <p>""Chapter 4. Asymptotic behavior of the basic solutions of L""""4.1. Estimate of ""; ""4.2. First estimate of and ""; ""4.3. End of the proof of Theorem 4.1""; ""Chapter 5. The kernels""; ""5.1. Two lemmas""; ""5.2. Proof of Theorem 5.1""; ""5.3. Modified kernels""; ""Chapter 6. The homogeneous equation L u=0""; ""6.1. Representation of solutions in a cylinder""; ""6.2. Cauchy integral formula""; ""6.3. Consequences"";</p> <p>""Chapter 7. The nonhomogeneous equation L u=F""; ""7.1. Generalized Cauchy Integral Formula""; ""7.2. The integral operator T""; ""7.3. Compactness of the operator T""</p> <p>""Chapter 8. The semilinear equation""""Chapter 9. The second order equation: Reduction""; ""Chapter 10. The homogeneous equation Pu=0""; ""10.1. Some properties""; ""10.2. Main result about the homogeneous equation Pu=0""; ""10.3. A maximum principle"";</p>

""Chapter 11. The nonhomogeneous equation $Pu=F$ ""; ""Chapter 12.
Normalization of a Class of Second Order Equations with a Singularity
""; ""Bibliography""
