

cases	doc_1		doc_2		decision	id
	authors	<ul style="list-style-type: none"><li>J. J. Rodriguez-Vega</li><li>W. A. ZÃ±iga-Galindo</li></ul>	authors	<ul style="list-style-type: none"><li>J. J. Rodriguez-Vega</li><li>W. A. ZÃ±iga-Galindo</li></ul>	DUPLICATES	210
	title	ELLIPTIC PSEUDODIFFERENTIAL EQUATIONS AND SOBOLEV SPACES OVER p-ADIC FIELDS	title	Elliptic Pseudo-Differential Equations and Sobolev Spaces over p-adic Fields		
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	urls	<ul style="list-style-type: none"><li>https://www.semanticscholar.org/paper/be41ec61628f6f4fc900388c5fa204cc74b1322a</li></ul>	urls	<ul style="list-style-type: none"><li>https://www.semanticscholar.org/paper/b65ace4a60a99aec58dc93bf7ddf30394b94cf5b</li></ul>		
	id	id-223822321197391399	id	id731584263564688052		
	abstract	We study the solutions of equations of type $f. D; / uD v$ , where $f. D; /$ is a p-adic pseudodifferential operator. If $v$ is a Bruhatâ€™Schwartz function, there exists a distribution $E$ , a fundamental solution, such that $uD E v$ is a solution. However, it is unknown to which function space $E v$ belongs. We show that if $f. D; /$ is an elliptic operator, then $uD E v$ belongs to a certain Sobolev space, and we give conditions for the continuity and uniqueness of $u$ . By modifying the Sobolev norm, we establish that $f. D; /$ gives an isomorphism between certain Sobolev spaces.	abstract	We study the solutions of equations of type $f(D,\alpha)u=v$ , where $f(D,\alpha)$ is a $p$ -adic pseudo-differential operator. If $v$ is a Bruhat-Schwartz function, then there exists a distribution $E_{\alpha}$ , a fundamental solution, such that $u=E_{\alpha}\ast v$ is a solution. However, it is unknown to which function space $E_{\alpha}\ast v$ belongs. In this paper, we show that if $f(D,\alpha)$ is an elliptic operator, then $u=E_{\alpha}\ast v$ belongs to a certain Sobolev space. Furthermore, we give conditions for the continuity and uniqueness of $u$ . By modifying the Sobolev norm, we can establish that $f(D,\alpha)$ gives an isomorphism between certain Sobolev spaces.		
	versions		versions			