

cases	doc_1		doc_2		decision	id
	authors	<ul style="list-style-type: none">Denk, RobertPlořŸ, DavidRau, SophiaSeiler, Jřrg	authors	<ul style="list-style-type: none">Robert DenkDavid PlořŸSophia RauJřrg Seiler	DUPLICATES	537
	title	Boundary value problems with rough boundary data	title	Boundary value problems with rough boundary data		
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	id	id-2169357243856135625	id	id-8069909936393862938		
	abstract	We consider linear boundary value problems for higher-order parameter-elliptic equations, where the boundary data do not belong to the classical trace spaces. We employ a class of Sobolev spaces of mixed smoothness that admits a generalized boundary trace with values in Besov spaces of negative order. We prove unique solvability for rough boundary data in the half-space and in sufficiently smooth domains. As an application, we show that the operator related to the linearized Cahn–Hilliard equation with dynamic boundary conditions generates a holomorphic semigroup in $L^p(\mathbb{R}^n_+)\times L^p(\mathbb{R}^{n-1})$.Comment: 41 page	abstract	We consider linear boundary value problems for higher-order parameter-elliptic equations, where the boundary data do not belong to the classical trace spaces. We employ a class of Sobolev spaces of mixed smoothness that admits a generalized boundary trace with values in Besov spaces of negative order. We prove unique solvability for rough boundary data in the half-space and in sufficiently smooth domains. As an application, we show that the operator related to the linearized Cahn–Hilliard equation with dynamic boundary conditions generates a holomorphic semigroup in $L^p(\mathbb{R}^n_+)\times L^p(\mathbb{R}^{n-1})$.		
	versions		versions			