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abstract	We study well-posedness of boundary value problems of Dirichlet and Neumann type for elliptic systems on the upper half-space with coefficients independent of the transversal variable, and with boundary data in fractional Besov-Hardy-Sobolev (BHS) spaces. Our approach uses minimal assumptions on the coefficients, and in particular does not require De Giorgi-Nash-Moser estimates. Our results are completely new for the Hardy-Sobolev case, and in the Besov case they extend results recently obtained by Barton and Mayboroda. First we develop a theory of BHS spaces adapted to operators which are bisectorial on L^2, with bounded H^∞ functional calculus on their ranges, and which satisfy L^2 off-diagonal estimates. In particular, this theory applies to perturbed Dirac operators DB. We then prove that for a nontrivial range of exponents (the identification region) the BHS spaces adapted to DB are equal to those adapted to D (which correspond to classical BHS spaces). Our main result is the classification of solutions of the elliptic system $\operatorname{div} A \nabla u = 0$ within a certain region of exponents. More precisely, we show that if the conormal gradient of a solution belongs to a weighted tent space (or one of their real interpolants) with exponent in the classification region, and in addition vanishes at infinity in a certain sense, then it has a trace in a BHS space, and can be represented as a semigroup evolution of this trace in the transversal direction. As a corollary, any such solution can be represented in terms of an abstract layer potential operator. Within the classification region, we show that well-posedness is equivalent to a certain boundary projection being an isomorphism. We derive various consequences of this characterisation, which are illustrated in various situations, including in particular that of the Regularity problem for real equations.	We study well-posedness of boundary value problems of Dirichlet and Neumann type for elliptic systems on the upper half-space with coefficients independent of the transversal variable, and with boundary data in fractional Besov-Hardy-Sobolev (BHS) spaces. Our approach uses minimal assumptions on the coefficients, and in particular does not require De Giorgi-Nash-Moser estimates. Our results are completely new for the Hardy-Sobolev case, and in the Besov case they extend results recently obtained by Barton and Mayboroda. First we develop a theory of BHS spaces adapted to operators which are bisectorial on L^2, with bounded H^∞ functional calculus on their ranges, and which satisfy L^2 off-diagonal estimates. In particular, this theory applies to perturbed Dirac operators DB. We then prove that for a nontrivial range of exponents (the identification region) the BHS spaces adapted to DB are equal to those adapted to D (which correspond to classical BHS spaces). Our main result is the classification of solutions of the elliptic system $\operatorname{div} A \nabla u = 0$ within a certain region of exponents. More precisely, we show that if the conormal gradient of a solution belongs to a weighted tent space (or one of their real interpolants) with exponent in the classification region, and in addition vanishes at infinity in a certain sense, then it has a trace in a BHS space, and can be represented as a semigroup evolution of this trace in the transversal direction. As a corollary, any such solution can be represented in terms of an abstract layer potential operator. Within the classification region, we show that well-posedness is equivalent to a certain boundary projection being an isomorphism. We derive various consequences of this characterisation, which are illustrated in various situations, including in particular that of the Regularity problem for real equations.		
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