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	id	id2470804623876802593	id	id-8613236974053132518		
	abstract	AbstractOur aim is to characterize the homogeneous fractional Sobolev–SlobodeckiÄ spaces \$\$\mathcal {D}^{s,p} (\mathbb {R}^n)\$\$ D s , p (R n) and their embeddings, for \$\$s \in (0,1]\$\$ s â^ (0, 1] and \$\$p\ge 1\$\$ p ≥ 1. They are defined as the completion of the set of smooth and compactly supported test functions with respect to the Gagliardo–SlobodeckiÄ seminorms. For \$\$sp < n\$\$ s p < n or \$\$s = p = n = 1\$\$ s = p = n = 1 we show that \$\$\mathrm{D}^{s,p}(\mathbb{R}^n)\$\$ D s , p (R n) is isomorphic to a suitable function space, whereas for \$\$sp \ ge n\$\$ s p ≥ n it is isomorphic to a space of equivalence classes of functions, differing by an additive constant. As one of our main tools, we present a Morrey–Campanato inequality where the Gagliardo–SlobodeckiÄ seminorm controls from above a suitable Campanato seminorm.	abstract versions	Our aim is to characterize the homogeneous fractional Sobolev-Slobodecki \ddot{A} spaces $\check{\delta}$ ' \ddot{Y} 's,p (\hat{a} ,^n) and their embeddings, for s \hat{a} ^ (0,1] and p \hat{a} % $\frac{1}{2}$ 1. They are defined as the completion of the set of smooth and compactly supported test functions with respect to the Gagliardo-Slobodecki \ddot{A} seminorms. For s p < n or s = p = n = 1 we show that $\check{\delta}$ ' \ddot{Y} 's,p(\hat{a} ,,^n) is isomorphic to a suitable function space, whereas for s p \hat{a} % $\frac{1}{2}$ n it is isomorphic to a space of equivalence classes of functions, differing by an additive constant. As one of our main tools, we present a Morrey-Campanato inequality where the Gagliardo-Slobodecki \ddot{A} seminorm controls from above a suitable Campanato seminorm.		
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