On Generalized Hölder Spaces

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The Hölder spaces $C^{\alpha}(\mathbb{R}^d)$ $(\alpha > 0)$ provide a natural way for measuring the smoothness of a function. These spaces appear in different areas such as approximation theory and multifractal analysis. The purpose of this poster is to present a generalization of such spaces as well as some recent results about their characterizations ([1, 2]). These spaces are a particular case of a generalization of Besov Spaces who have recently been extensively studied ([4]).

References

[1] D. Kreit, S. Nicolay, Some characterizations of generalized Hölder spaces, Math. Nachr. 285 (2012), 2157-2172.

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[3] D. Kreit, S. Nicolay, Generalized Pointwise Hölder Spaces, *submitted*.

[4] S. D. Moura, On some characterizations of Besov spaces of generalized smoothness, Math. Nachr. 280 (2007), 1190-1199.