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Recent progresses on superposition in Besov-Lizorkin-Triebel spaces

For a given function space E , the Superposition Operator Problem (S.O.P) consists in the complete description of the class of functions f , defined on \mathbb{R} , such that $f \circ g \in E$ for all $g \in E$. Since 2005, major progresses have been made on the S.O.P in Besov-Lizorkin-Triebel spaces. A typical result is the following: for $s > 1 + (1/p)$, the functions which act on $B_{p,q}^s(\mathbb{R})$ or $F_{p,q}^s(\mathbb{R})$ by superposition are precisely the functions in $B_{p,q}^s(\mathbb{R})_{loc}$ or $F_{p,q}^s(\mathbb{R})_{loc}$, respectively, vanishing at 0. The S.O.P is still open for $1 < s \leq 1 + (1/p)$, and for spaces in \mathbb{R}^n , $n > 1$.