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Pseudo-multipliers on Hermite Besov and Hermite Triebel-Lizorkin spaces

We will present boundedness properties of pseudo-multipliers with symbols of Hörmander-type in function spaces associated to the Hermite operator. The main tools in the proofs involve new molecular decompositions and molecular synthesis estimates for Hermite Besov and Hermite Triebel-Lizorkin spaces, which allow to obtain boundedness results on spaces for which the smoothness allowed includes non-positive values. In particular, we obtain continuity results for pseudo-multipliers on Lebesgue and Hermite local Hardy spaces. This is based on joint work with Fu Ken Ly (The University fo Sydney).