

# Fréchet frames for spaces of distributions and ultradistributions

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In this talk we focus on certain localized frames and show that they form Fréchet frames for appropriately chosen Fréchet spaces, in particular, for the Schwartz space of rapidly decreasing functions and for spaces of sub-exponentially decreasing functions. Furthermore, we consider series expansions and characterizations of the above mentioned spaces and their duals, based on the Hermite orthonormal bases, and extend them to the frame-setting. Finally, we introduce a more general “localization”-concept and present corresponding results.

The talk is based on a joint work with Stevan Pilipović.