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# GENERALIZED GABOR TRANSFORM FOR A STRONG GELFAND PAIR

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Abstract. Let $G$ be a locally compact hypergroup and let $K$ be a compact sub-hypergroup of $G$ such that $(G, K)$ is a Gelfand pair. The pair $(G, K)$ is said to be strong if $\widehat{G^K}$ the dual space of $G$ with respect to $K$ is a hypergroup. In this paper, assuming that $(G, K)$ is a strong Gelfand pair, we study a Gabor transform on $G$ and establish Plancherel formulas for the pair $(G, K)$.

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