

DHR bimodules and Kramers-Wannier type dualities on the lattice

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Given a spin chain with fusion category symmetry C , the symmetric subalgebra B of the quasi-local algebra A has the structure of a net of algebras over $\mathbb{Z}$, and its category of DHR bimodules is equivalent to the Drinfeld center of C . We will introduce a natural generalization of Kramers-Wannier duality channels in terms of bounded spread automorphisms of the symmetric subalgebra B . We describe recent results which give a classification of dualities up to symmetric finite depth circuits in certain cases. We also characterize the anomalies of these dualities, which force gaplessness in the IR for any covariant state and give several examples.