

$\mathbb{Z}k-1$ -Cartan subalgebras in k -graph C^* -algebras

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Higher-rank graphs, or k -graphs, are k -dimensional generalizations of directed graphs; the combinatorial structure of the k -graph is reflected in the associated C^* -algebra. The first investigations of k -graph C^* -algebras, by Kumjian and Pask, showed that these C^* -algebras have a canonical groupoid model. In joint work with J.H. Brown, we identify another groupoid model for certain k -graph C^* -algebras, using the concept of Γ -Cartan subalgebras introduced by Brown, Fuller, Pitts, and Reznikoff.