

The C^* -algebra of Toeplitz operators associated with a polyhedral cone

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We consider the C^* -algebra \mathcal{T} generated by the multivariable Toeplitz operators associated with a polyhedral cone. We present \mathcal{T} as a groupoid C^* -algebra: $\mathcal{T} \cong C^*(\mathcal{G})$. The groupoid \mathcal{G} is a reduction of a transformation group $\mathcal{G} = (Y \times Z^n)|X$, where Y and X are suitable topological spaces. This enables us to describe the ideal structure of \mathcal{T} .

We use cyclic cohomology to give a formula for computing the index of Fredholm operators in \mathcal{T} .