CONFORMAL NETS AND KK-THEORY

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Abstract. Given a completely rational conformal net $\mathcal{A}$ on $S^1$, its fusion ring acts faithfully on the K-group $K_0(\mathfrak{R}_\mathcal{A})$ of a certain universal $C^*$-algebra $\mathfrak{R}_\mathcal{A}$ associated to $\mathcal{A}$, as shown in a previous paper. We prove here that this action can actually be identified with a Kasparov product, thus paving the way for a fruitful interplay between conformal field theory and KK-theory.

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