

## INVERSE SEMIGROUP EQUIVARIANT *KK*-THEORY AND $C^*$ -EXTENSIONS

BERNHARD BURGSTALLER

**Abstract.** In this note we extend the classical result by G. G. Kasparov that the Kasparov groups  $KK_1(A, B)$  can be identified with the extension groups  $\text{Ext}(A, B)$  to the inverse semigroup equivariant setting.

More precisely, we show that  $KK_G^1(A, B) \cong \text{Ext}_G(A \otimes \mathcal{K}_G, B \otimes \mathcal{K}_G)$  for every countable,  $E$ -continuous inverse semigroup  $G$ .

For locally compact second countable groups  $G$  this was proved by K. Thomsen, and technically this note presents an adaption of his proof.

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