

1023-47-582

David Milan* (dmilan@math.unl.edu), 203 Avery Hall, Lincoln, NE 68588-0130. *C*-Algebras of Inverse Semigroups: Amenability and Weak Containment*. Preliminary report.

We argue that weak containment is the right notion of amenability for inverse semigroups. Given an inverse semigroup S and a homomorphism ϕ of S onto a group G , we show S has weak containment if and only if G is amenable and the kernel of ϕ has weak containment. Using Fell bundle amenability, we extend this result in a way that is suited for inverse semigroups with zero. We show that all graph inverse semigroups have weak containment and that Nica's inverse semigroup of a quasi-lattice ordered group has weak containment if and only if the quasi-lattice ordered group is amenable in Nica's sense. (Received September 18, 2006)