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**Geoff R Goehle\*** ([grgoehle@email.wcu.edu](mailto:grgoehle@email.wcu.edu)), Stillwell 426, Cullowhee, NC 28723. *The Mackey Machine for Groupoid Crossed Products.*

We identify the spectrum of regular groupoid crossed products using the methodology of the Mackey Machine. Specifically, we show that given a regular groupoid  $G$  whose isotropy subgroupoid  $S$  has a Haar system, along with an action of  $G$  on a  $C^*$ -algebra  $A$ , then there is an action of  $G$  on the spectrum of the group crossed product bundle  $A \rtimes S$  such that the spectrum of the groupoid crossed product  $A \rtimes G$  is homeomorphic to the orbit space  $A \rtimes S/G$  via induction. (Received September 01, 2010)