

1163-47-378

**Erin Griesenauer\*** (grieseel@eckerd.edu), **Paul Muhly** and **Baruch Solel**. *Noncommutative Functions, Matrix Bundles, and Azumaya Algebras*.

We study noncommutative function algebras as subalgebras of  $n$ -homogeneous  $C^*$ -algebras. These algebras may be viewed as cross sections of certain holomorphic matrix bundles which arise naturally in noncommutative function theory and geometric invariant theory. We describe the connection between these algebras and bundles, and show that the function algebras we consider are Azumaya algebras. (Received September 04, 2020)