Michigan Math Club

Thursday at 4pm in the Commons
Free Pizza and Pop

Noncommutative Algebra ?!

Chelsea Walton

Abstract for 1 October 2009

We prove the following statement.

Theorem 1. *Noncommutative algebra is a beautiful subject!*

Proof. The result follows from the lemmas below.

Lemma 2. *Noncommutative algebra aids in the study of objects arising in nature. In other words the subject goes hand in hand with physics, e.g. with the Uncertainty Principle.*

Lemma 3. *We are already familiar with examples of noncommutative structures. Moreover there exist others that are readily accessible, e.g. the Weyl algebra.*

Lemma 4. *The field has been in existence for quite some time and remains of strong interest to mathematicians. (Representation theory!)* □

We refer to the talk for proofs of these lemmas.