CCSU department of mathematical sciences COLLOQUIUM

Friday, March 18 2:00 – 3:00 PM Maria Sanford, Room 101

COMMUTATIVITY IN A FREE ASSOCIATIVE ALGEBRA

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<u>Abstract:</u> A free associative algebra can be viewed in different ways. Its elements can be thought of as tensors, as linear combinations of words in a fixed alphabet or as non-commutative polynomials. In a free associative algebra the following defect theorem for two elements holds: Either two elements freely generate a subalgebra, or they lie in a subalgebra generated by a single polynomial. The talk will be an exposition of the work of George M. Bergman and Paul Cohn on this topic.

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