מכון ויצמן למדע

THE WEIZMANN INSTITUTE OF SCIENCE

FACULTY OF MATHEMATICS AND COMPUTER SCIENCE

Algebraic Geometry and Representation Theory Seminar

Room 290C ,Ziskind Building
on Wednesday, Dec 20, 2017
at 11:15

NOTE UNUSUAL TIME AND ROOM

Lenny Makar-Limanov
Wayne University

A Bavula conjecture

Abstract:

Abstract. As is well known and easy to prove the Weyl algebras A_n over a field of characteristic zero are simple. Hence any non-zero homomorphism from A_n to A_m is an embedding and m \geq n. V. Bavula conjectured that the same is true over the fields with finite characteristic. It turned out that exactly one half of his conjecture is correct (m \geq n but there are homomorphisms which are not embeddings).
If we replace the Weyl algebra by its close relative symplectic Poisson algebra (polynomial algebra with F[x_1, ..., x_n; y_1, ..., y_n] variables and Poisson bracket given by {x_i, y_i} =1 and zero on the rest of the pairs), then independently of characteristic all homomorphisms are embeddings.

Email: hanni.naor@weizmann.ac.il * Phone: (08)9343349 * Fax: (08)9344308