On superalgebras with superinvolution and their *-graded polynomial identities

Onofrio Mario Di Vincenzo

Università degli Studi della Basilicata, Italy

onofrio.divincenzo@unibas.it

In this talk we consider block-triangular matrix algebras with superinvolution related to a finite sequence of finite dimensional simple *-superalgebras. These superalgebras and their *-graded polynomial identities appear in the positive solution of Specht's problem for algebras with involution, given in [1] by Aljadeff, Giambruno and Karasik. The finite dimensional simple *-superalgebras are the basic buildings in order to determine the exact value of the *exponent* for finitely generated superalgebras with superinvolution (see [2]). In this talk we discuss some problem related to it.

References

[1] E. Aljadeff, A. Giambruno, Y. Karasik, *Polynomial identities with involution, superinvolutions and the Grassmann envelope.* Proc. Amer. Math. Soc. **145** (2017), no. 5, 1843-1857.

[2] A. Ioppolo, *The exponent for superalgebras with superinvolution*, Linear Algebra and its Applications **555** (2018), 1-20.