

# First Joint Meeting Brazil Italy of Mathematics Special Session: Ring Theory and its Applications

Rio de Janeiro, August 29 - September 02, 2016

**Title:** Algebras with involution generating  $*$ -varieties

**Authors:** Irina Sviridova

**Abstract:** The Specht problem is the central problem of theory of polynomial identities of algebras. All the known positive answers for the Specht problem for various types of identities are based on the classification type theorems for varieties (classes of algebras defined by families of identities). These theorems essentially restrict types of algebras that generate varieties. Particularly, it means that any concerned variety can be generated by an algebra with a rather good explicit description. These results are very useful for study of identities and varieties.

We are going to discuss the structure properties of algebras generating varieties of associative algebras with some complementary structures such as involutions and graded involutions. We also will consider the relations of some properties and characteristic of the algebras with the corresponding identities. The work was partially supported by FAPESP, CNPq, Capes.