1145-47-346   **Orr Moshe Shalit*** (`oshalit@technion.ac.il`), Department of Mathematics, 3200000 Haifa, Israel. *Noncommutative varieties and the classification of some universal operator algebras.*

In this talk, we consider the universal norm-closed operator algebra generated by a row contraction satisfying some homogeneous polynomial identities. The isomorphism problem was solved, for the case where the ideal of identities was radical and commutative, almost ten years ago by Davidson-Ramsey-Shalit and Hartz. Over the years, progress has been made in generalizing this result in several different directions. In this talk I will discuss some of the recent results as well as several open questions that arise in this quest, putting an emphasis on the role of noncommutative varieties. (Received September 03, 2018)