

## **Title: Relativized Lascar topological groups**

Abstract: The Lascar group of a given complete theory  $T$  is an analogous notion of the absolute Galois group of a field. We relativize the notion over a complete strong type and obtain several interesting results. For example, if some finite tuple  $b$  is algebraic over  $c$  in a model of  $G$ -compact  $T$ , and a relativized Lascar group of the strong type of  $bc$  is abelian then the Lascar group is isomorphic to that of  $c$ . If  $T$  is simple then any strong type has divisible amalgamation. Compact group theory (in elementary level) is used in the proofs. This is a joint work with J. Dobrowolski, A. Kolesnikov, and J. Lee.