## EHUD MEIR, University of Aberdeen

Descent and generic forms using symmetric monoidal categories

Let A be some algebraic structure (e.g. Hopf or lie algebra) defined over a field K of characteristic zero. Classical descent theory asks over what fields does A have a form, and what are all the possible forms over subfields of K. In this talk I will explain how to address this problem using the theory of Deligne on symmetric monoidal categories. I will construct a symmetric monoidal category  $C_A$ , defined over a subfield  $K_0$  of K, and I will show that forms over an intermediate field  $K_1$  are in one to one correspondence with fiber functors from  $C_A$  to  $Vec_{K_1}$ . This also leads to the construction of generic forms, that specialize to all forms of A.