

**ABSTRACT FOR THE JUNE 2009 LISBON SUMMER SCHOOL
COURSE ON CROSSED PRODUCT C*-ALGEBRAS**

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We present an introduction to the theory of crossed products of C^* -algebras by actions of locally compact groups, with emphasis on the background needed for recent work on the classification of crossed products. We will begin with the definition and basic properties of the crossed product construction. We include motivation and a large collection of examples of group actions on C^* -algebras. Then we will do some more or less explicit computations of crossed product C^* -algebras. The final part of the course will discuss the classification of crossed products by minimal homeomorphisms of infinite compact metric spaces.

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