

# A SURVEY OF ORLICZ ALGEBRAS ON LOCALLY COMPACT GROUPS

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ABSTRACT. Let  $G$  be a locally compact group,  $\Phi$  be a Young function, and denote by  $L^\Phi(G)$  the associated Orlicz space. This talk is a survey of results on Banach algebra and Banach module structures of Orlicz spaces on  $G$  that we have obtained recently in collaboration with our colleagues. We present conditions for an Orlicz algebra to be Arens regular. We investigate their cohomological properties such as amenability. We determine when an Orlicz algebra is an operator algebra. Our approach can be applied to a vast variety of cases and extend the results in the classical situation.

This presentation is based on joint works with Ebrahim Samei and Varvara Shepelska of University of Saskatchewan, Canada.

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