

# Henstock-Kurzweil and other types of integral for Banach lattice-valued functions and multifunctions

Domenico Candeloro

Workshop on Effect Algebras, Boolean Algebras & Related Topics

Udine (Italy) — January 25–27, 2016

## **Abstract**

Henstock-type integrals are studied and compared, for functions taking values in a Banach lattice and defined in a pointwise nonatomic measure space. Both norm and order convergences are considered. This setting is used in order to consider also multifunctions, taking values in the family of weakly compact and convex subsets of a Banach space  $X$ , thanks to a Radstrom-type embedding theorem.