Girotto, Bruno; Holzer, Silvano
Chebyshev and Jensen inequalities for Choquet integral. (English) Zbl 1289.28015

Summary: We supply Chebyshev and Jensen type inequalities for the Choquet integral. Moreover, in
the setting of normalized linear functionals on a real vector space of measurable functions including all
bounded ones, we state the equivalence of these inequalities and the positivity condition of functionals.

MSC:

28E10    Fuzzy measure theory
28B15    Set functions, measures and integrals with values in ordered spaces
60A86    Fuzzy probability

Keywords:
monotone set function; Choquet integral; Chebyshev inequality; Jensen inequality; comonotonicity