

Why should one study (11) at all? If this is answered satisfactorily (and the reviewer believes it might), why should one adopt (13) as a definition of solution (especially because it leads to discrepancies)?

This book, and part of the literature on impulsive ODE, are fundamentally flawed.

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Einhüllende Algebren halbeinfacher Lie-Algebren, by Jens C. Jantzen, *Ergebnisse der Mathematik und ihrer Grenzgebiete 3. Folge · Band 3, A Series of Modern Surveys in Mathematics*, Springer-Verlag, Berlin, 1983, 298 pp., DM 118; Approx. U.S. \$45.80. ISBN 3-5401-2178-1

One of the fundamental problems in abstract harmonic analysis is the determination of the set of (equivalence classes of) irreducible unitary representations of a topological group G . These are continuous homomorphisms of G into the group of unitary operators on a Hilbert space; one assumes, in addition, that the Hilbert space has no nontrivial closed subspaces invariant under the whole group. This is a nonlinear problem, in the sense that group elements and unitary operators can be multiplied, but not added. It is tempting to look for ways to linearize things, for example because of the great success that idea enjoys in the elementary representation theory of finite groups. (There one considers the convolution algebra of all functions on the group. The