

RADON-NIKODYM THEOREMS FOR WEAK SET VALUED MEASURES NOT NECESSARILY BOUNDED

Gabriel Birame Ndiaye and Ibrahima Diankha

Received December 28, 2015

Abstract

ISSN: 2230-9829

Pioneer Journal of Mathematics and Mathematical Sciences

> Pioneer Scientific Publisher

In this paper, we prove two Radon Nikodym theorems. We consider, first, two monotones s-compact weak set valued measures, with closed convex values, not necessarily bounded, one of them being absolutely continuous with respect to the other one. Second, we consider that the one of the set valued measures is not monotone, and is absolutely continuous with respect to the other one which is monotone. The densities we get, are numerical functions. The same can be done for two set valued Radon measures, for two relatively weakly compact vector measures, and also for two weakly compact vector Radon measures, both of them being s-compact.

Keywords and phrases: convex analysis, integration, set valued measures, integral of Daniell.