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VAGUE AND BASIC CONVERGENCE OF SIGNED MEASURES

MICHAEL STANĚK

Abstract. We study the relationship between different kinds of convergence of finite signed measures and discuss their metrizability. In particular, we study the concept of basic convergence recently introduced by Khartov [11] and introduce the related concept of almost basic convergence. We discover that a sequence of finite signed measures converges vaguely if and only if it is locally uniformly bounded in variation and the corresponding sequence of distribution functions either converges in Lebesgue measure up to constants, converges basically, or converges almost basically.

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