▶ DAMIAN SOBOTA, *P-measures in random extensions*.
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Let μ be a finitely additive probability measure on ω which vanishes on points, that is, $\mu(\{n\}) = 0$ for every $n \in \omega$. It follows immediately that μ is not σ-additive, however it may be almost σ-additive in the following weak sense. We say that μ is a *P-measure* if for every decreasing sequence (A_n) of subsets of ω there is a subset A such that $A \setminus A_n$ is finite for every n and $\mu(A) = \lim_n \mu(A_n)$. P-measures can be thought of as generalizations of P-points and similarly as in the case of P-points the existence of P-measures is independent of ZFC.

During my talk I will discuss basic properties of P-measures and show, at least briefly, that using old ideas of Solovay and Kunen one can obtain a non-atomic P-measure in the random model. The latter result implies that in this model ω^* contains a closed nowhere dense ccc P-set, which may be treated as a (weak) partial answer to the open question asking whether there are P-points in the random model.

This is a joint work with Piotr Borodulin-Nadzieja.