Title. Measurable Vizing's theorem

Abstract. Vizing's theorem asserts that every graph of degree bounded by $\Delta < +\infty$ admits a proper edge coloring with $(\Delta + 1)$ colors. I will discuss versions of this theorem in the context of measurable graph combinatorics. I will mainly focus on the case when the graph in question is defined on a standard probability space (X , μ) . In this situation, a combination of an augmenting chain technique developed earlier with Oleg Pikhurko (that was applied for graphings) together with a new result about quasi-invariant measures allows to deduce a full analogue of Vizing's theorem.