Pair Correlations in the p-adic setting

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The pair correlation statistic is an important concept in real uniform distribution theory. Sequences in the unit interval with Poissonian pair correlations (PPC) have attracted a lot of attention in recent time. It is a standard question how to transfer the concept to a p-adic setting. In this talk, we thus suggest a generalization of PPC to the p-adic integers. In particular, connections to p-adic discrepancy theory are discussed.

[1] Weiß, Christian (2023). A p-adic Poissonian Pair Correlation Concept. Preprint.