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Xiaoqin Guo*, 150 N University St, West Lafayette, IN 47907, and **N Berger, J.-D. Deuschel**
and **A. F Ramirez**. *Central limit theorems for random walks in balanced random environment.*

In this talk we will discuss random walks in a zero-drift ergodic random environment on Z^d which is allowed to be non-elliptic. We will obtain a condition of the quenched central limit theorem (QCLT) for non-elliptic environment, which generates all currently known conditions. We will also show that the limiting diffusion constants of the QCLT maybe random, if the ergodic environment is not mixing enough. This is a joint work with my coauthors Noam Berger, Jean-Dominique Deuschel and Alejandro Ramirez. (Received February 01, 2017)