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Jason Atnip* (jason.atnip@unt.edu). *An almost sure invariance principle for several classes of random dynamical systems.*

In this talk we deal with a large class of dynamical systems having a version of the spectral gap property. Our primary class of systems comes from random dynamics, but we also deal with the deterministic case. We show that if a random dynamical system has a fiberwise spectral gap property as well as an exponential decay of correlations in the base, then, developing on Gouëzel's approach, the system satisfies the almost sure invariance principle. The result is then applied to uniformly expanding random systems like those studied by Denker and Gordin and Mayer, Skorulski, and Urbański. (Received February 12, 2018)