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Herold Dehling* (herold.dehling@rub.de), Fakultät für Mathematik, Ruhr-Universität Bochum, D-44780 Bochum, Germany, and **Olivier Durieu** and **Dalibor Volny**. *Empirical Process Invariance Principle for Markov Chains*.

We investigate empirical process invariance principles for Markov chains and dynamical systems under weak conditions. We have developed a technique of proof that can generally be applied when a central limit theorem and a moment bound are known for partial sums of Lipschitz functions of the process. Our proof uses a variant of chaining techniques together with an improved version of Theorem 4.2. of Billingsley's 1968 book. (Received February 04, 2008)