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Sana Louhichi* (sana.louhichi@imag.fr). *Functional convergence to stable Lévy motions for iterated random lipschitz mappings.*

It is known that, in the dependent case, partial sums processes which are elements of $D([0,1])$ (the space of right-continuous functions on $[0,1]$ with left limits) do not always converge weakly in the J1-topology sense. The purpose of our paper is to study this convergence in $D([0,1])$ equipped with the M1-topology, which is weaker than the J1 one. We prove that if the jumps of the partial sum process are associated then a functional limit theorem holds in $D([0,1])$ equipped with the M1-topology, as soon as the convergence of the finite-dimensional distributions holds. We apply our result to some stochastically monotone Markov chains arising from the family of iterated Lipschitz models. This is a joint work with E. Rio (Received August 04, 2013)