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Partha Sarathi Dey* (psdey@illinois.edu), Department of Mathematics, University of Illinois at Urbana-Champaign, and **Nikos Zygouras**. *High temperature limits for (1+1)-D directed polymer with heavy-tailed disorder.*

The directed polymer model at intermediate disorder regime was introduced by Alberts-Khanin-Quastel in 2012. It was proved that at inverse temperature $\beta n^{-\gamma}$ with $\gamma = 1/4$ the partition function, centered appropriately, converges in distribution and the limit is given in terms of the solution of the stochastic heat equation. This result was obtained under the assumption that the disorder variables possess exponential moments, but its universality was also conjectured under the assumption of six moments. We show that this conjecture is valid and we further extend it by exhibiting the non-universal limiting behavior in the case of less than six moments. We also explain the behavior of the scaling exponent for the log-partition function under different moment assumptions and values of γ . (Received January 20, 2015)