

# The extremes of random walks in random scenery

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We analyse the behaviour of the extremes of a random walk in a random scenery. The random walk is assumed to be in the domain of attraction of a stable law and the scenery is assumed to be in the domain of attraction of an extreme value distribution. The resulting random sequence is stationary and has relatively strong dependencies when the underlying random walk is recurrent (for example it does not satisfy Leadbetter's conditions  $D(u_n)$  and  $D'(u_n)$ ). However, we are able to prove a limit theorem for the extremes of the resulting stationary process. In the recurrent case the limit-distribution is not in the class of classical extreme value distributions.

## References

B. Franke and T. Saigo, The extremes of random walks in random scenery, *Advances in Applied. Prob.*, to appear