1125-60-918 **Gérard Ben Arous**, **Manuel Cabezas** and **Alexander Fribergh***
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QC H3T 1J4, Canada. *The ant in a labyrinth.*

One of the most famous open problem in random walks in random environments is to understand the behavior of a simple random walk on a critical percolation cluster, a model known as the ant in the labyrinth. I will present new results on the scaling limit for the simple random walk on the critical branching random walk in high dimension. In the light of lace expansion, we believe that the limiting behavior of this model should be universal for simple random walks on critical structures in high dimensions. (Received September 13, 2016)