

DREAMS: AN INTERDISCIPLINARY PROJECT. DYNAMICS OF RANDOM EXPANDING MULTISCALE NETWORKS

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I shall first present the biology of fungal networks: filamentous fungi, apexes, hyphae, thallus, mycelium, give many examples and insist on the multi-scale aspects : from the nanoscale up to the very large scale. An essential diversion deals with combustion, flames, reactive flows, active fronts, which is also a multi-scale phenomenon. I will then draw a parallel between these two topics: random expanding (discrete) networks may yield active fronts. Finally, I will mention some possible other applications.

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