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Real life epidemics can be simulated in many different ways. Often a contact network is constructed and then a spreading process is defined on this network. A goal is then to determine how the nature of the network can affect the behavior of the spreading process.

In recent numerical experiments it was noted that vaccination strategies based on modulus centralities are very effective. Modulus of families of walks is a way (originated in function theory) to measure the richness of a family of walks, and so it is plausible that modulus would be useful in studying epidemics.

Here we define the concept of Epidemic Hitting Time (EHT). Then we relate the SI epidemic model to a variable-lengths model, and deduce from this that EHT is a metric. Moreover, we use a result of Lyons, Pemantle and Peres to show that one can give theoretical bounds for EHT in terms of modulus. (Received August 21, 2015)