Random walks on finite graphs and random interlacements

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In this talk we are going to review some of the recent progress in understanding the trace of a simple random walk on a finite graph. An important contribution to this topic has been the introduction of the random interlacements process, which models the microscopic texture left by the random walk when it is let run for a specific time scale. Later, we will overview some of the recent results obtained in this field and what is still left to be understood.