The figure illustrates the definition of W_t^i for $i \in [K]$. The value of W_t^i is obtained by summing the i.i.d. Gaussian variables $\xi_{t'}^i$'s on the edges along the path from W_0^i, i.e., summing over all $t' \in \mathcal{S}(t) \cup \{t\} \setminus \{0\}$. For example, $W_7^i = \xi_4^i + \xi_6^i + \xi_7^i$.