1139-60-531   **Marek Biskup*** (`biskup@math.ucla.edu`) and **Yoshihiro Abe**. *Extremal processes for the local time of the simple random walk on trees and tori.* Preliminary report.

I will attempt to elucidate the present understanding of the various extremal processes associated with the local time of simple random walk at multiples of the cover time. In particularly, I will compere these with the corresponding processes for the two dimensional Gaussian Free Field (DGFF). As it turns out, for the random walk on homogeneous tree, the two processes are remarkably close: their distribution differs only by a constant multiplying a limit intensity measure. (This was mostly shown by Y.Abe with the cluster process being resolved in collaboration of his with the speaker.) For the random walk on tori, we can currently offer only some understanding of the intermediate level sets (the thick points) of the local time. Also these show remarkable resemblance to those of the DGFF. Based on work in progress with Y. Abe. (Received February 19, 2018)