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**Yuri Bakhtin\*** ([bakhtin@math.gatech.edu](mailto:bakhtin@math.gatech.edu)), School of Mathematics, Atlanta, GA 30332. *SPDE limit for random trees*. Preliminary report.

We study the infinite random tree serving as the infinite volume limit for plane rooted trees under Gibbs distributions. We show that under a properly chosen rescaling this tree converges in a special topology to a solution of an SPDE that can be viewed as a random continuum tree. The SPDE defines infinite-dimensional stochastic dynamics on monotone transformations with interesting properties that will be discussed in the talk. (Received February 10, 2009)