1063-60-42 **Jason Schweinsberg*** (jschwein@math.ucsd.edu), Department of Mathematics, 0112, University of California, San Diego, 9500 Gilman Drive, La Jolla, CA 92093-0112, and **Julien Berestycki** and **Nathanael Berestycki**. *The genealogy of branching Brownian motion with absorption.*

We consider a system of particles which perform branching Brownian motion with negative drift and are killed upon reaching zero, in the near-critical regime where the total population stays roughly constant with approximately N particles. We show that the characteristic time scale for the evolution of this population is of the order $(\log N)^3$. Furthermore, the genealogy of the particles is then governed by a coalescent process known as the Bolthausen-Sznitman coalescent. This validates the non-rigorous predictions of Brunet, Derrida, Muller, and Munier for a closely related model. (Received July 22, 2010)