

I will present results of my joint work with Carsten Gundlach and Tadeusz Chmaj on the critical collapse in three-dimensional asymptotically anti-de Sitter spacetime. I will present results of our numerical experiments in the critical collapse of a spherically symmetric massless scalar field in $2+1$ spacetime dimensions in the presence of a negative cosmological constant and compare them against a new theoretical model. We approximate the true critical solution as the $n = 4$ Garfinkle solution, matched at the lightcone to a Vaidya-like solution, and corrected to leading order for the effect of $\Lambda < 0$. This approximation is only C^3 at the lightcone and has three growing modes. We conjecture that pointwise it is a good approximation to a yet unknown true critical solution that is analytic with only one growing mode (itself approximated by the top mode of our amended Garfinkle solution). With this conjecture, we predict a Ricci-scaling exponent of $\alpha = 8/7$ and a mass-scaling exponent of $\beta = 16/23$, compatible with our numerical experiments.