1084-37-159 **Kelly McQuighan***, kelly_mcquighan@brown.edu, and **Bjorn Sandstede**. *Oscillons near Planar Forced Hopf Bifurcations.* Preliminary report.

Oscillons are planar, spatially localized, temporally oscillating, radially symmetric structures. They have been observed in various experimental contexts, including fluid systems, granular systems, and chemical systems. Oscillons often arise near forced Hopf bifurcations, which are modeled mathematically with the forced complex Ginzburg-Landau (FCGL) equation. We present a proof of the existence of oscillons in the forced planar complex Ginzburg-Landau equation through a geometric blow-up analysis. Our analysis is complemented by a numerical continuation study of oscillons in the forced Ginzburg-Landau equation using Matlab and AUTO. (Received August 30, 2012)