

**Ben Lambert** (Durham, UK)

*Long Term Existence of Non-Parametric Mean Curvature Flow with a Neumann Boundary Condition.*

**Abstract.** Following Huiskens 1989 paper on a boundary problem for Mean Curvature Flow, I will prove a gradient bound on a graph over a general compact domain with a perpendicular Neumann boundary condition. This in turn shows the uniform parabolicity of the evolution equation for the graph and so leads to a Long Term Existence Theorem. With a little extra work we see that we in fact have convergence to a constant function.