

1110-35-345

Peter Constantin* (const@math.princeton.edu), Department of Mathematics, Princeton University, Fine Hall, Washington Road, Princeton, NJ 08544, and **Tarek Elgindi**, Department of Mathematics, Princeton University, Fine Hall, Washington Road, Princeton, NJ. *Nonlocal equations: electroconvection*. Preliminary report.

I will describe a system of equations arising in electroconvection in which nonlocal effects are due to the electric potential. I will prove some results of well-posedness and describe some open problems. This is joint work with Tarek Elgindi. (Received February 24, 2015)