## Global attractors for neural fields

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Abstract. In this paper we study the existence and upper semicontinuity of compact global attractors for the flow of the equation

$$\frac{\partial u(x,t)}{\partial t} = -u(x,t) + J * (f \circ u)(x,t) + h, \ h \ge 0,$$

where u(x,t) is a real function on  $\mathbb{R} \times \mathbb{R}_+$ , h is a non negative constant,  $J \in C^1(\mathbb{R})$  is a non negative even function supported in the interval [-1, 1], and, f is a non negative nondecreasing function. The \* above denotes convolution product, namely:

$$(J * u)(x) = \int_{\mathbb{R}} J(x - y)u(y)dy.$$