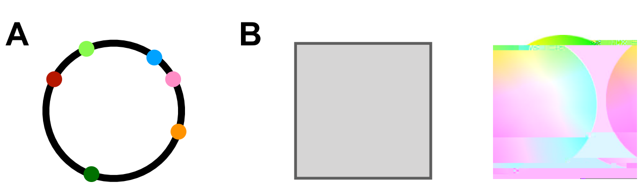
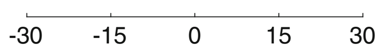

A
B

2.1 Model definition

2.2 Single bump solutions


-30
-15
0
15
30

$j = 1,$ … (.1) … (.), … $W(\ )$ …

$$(\ _j(\ ) - \ ) = W(\ \ (\ ) - \ _1(\ )),$$

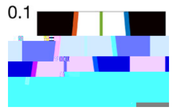
…

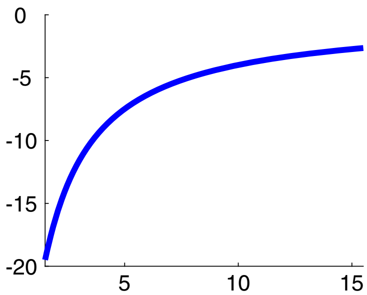
$$ _j(\ ) = \frac{(-1)^j}{\bar{\alpha}} \Big[-\theta + W(\ \ (\ ) - \ _1(\ )) + \sqrt{\epsilon \cdot \theta}\, Z(\ _j(\ ),\ )\Big] \qquad (\ .1\ )$$

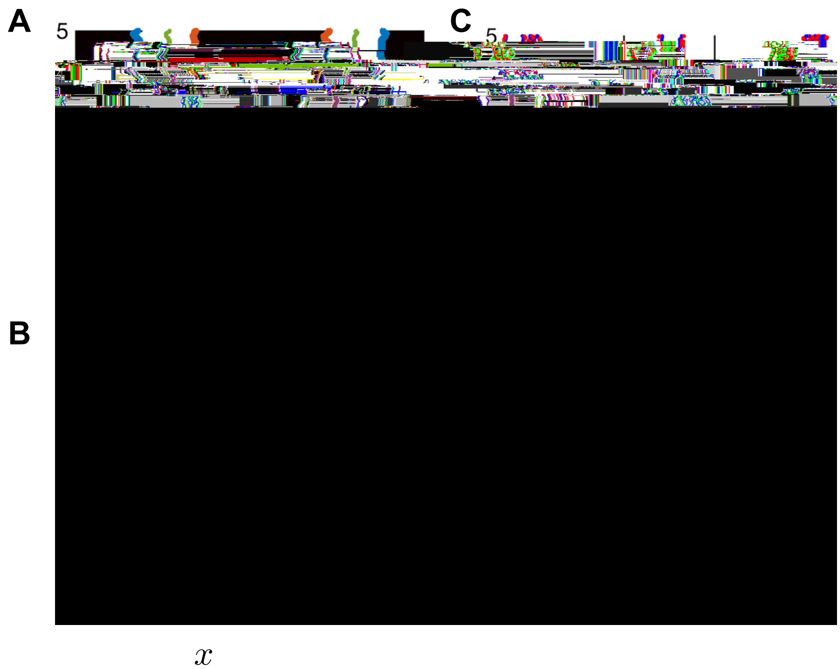
$j = 1,$ … (.1). … $(Z \equiv 0)$, …

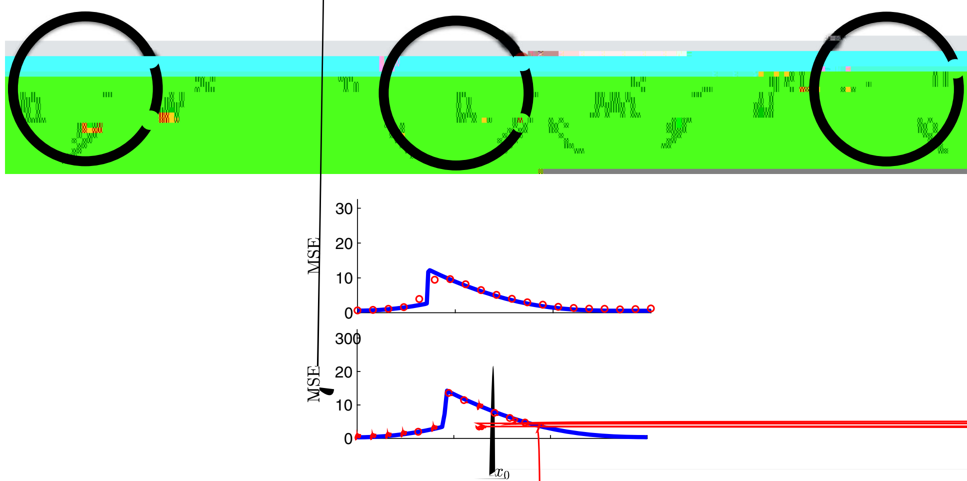
$$\frac{\ _j}{\ } = \frac{(-1)^j}{\bar{\alpha}} (-\theta + W(\ \ (\ ) - \ _1(\ ))) \qquad (\ .\ 0)$$

$j = 1,$ … ($_1$,) … $W(\ \ - \ _1) = \theta$


0.1


0
-5
-10
-15
-20
5
10
15


A
B
C
5
5
x


MSE
30
20
10
0
MSE
30
20
10
0
x_0

( ).

$(\Delta = D \cdot T)$,

$\mathcal{A} = 10$,

$\mathcal{A}$ (. 4).

($_0$ = 0),

$_0 \approx$

$^{-1} \approx \times 10^{-}$,

(.).

(005).

ϕ_1 ϕ

(00 , 010),

(00 , 00).

$\mathcal{A}$ $\mathcal{A}$.

$\mathcal{A}$ ( ), $\mathcal{A}$

$\mathcal{A} \approx 10$,

$\mathcal{A} = 1$, ( ),

( ).

(004, 00).

4 Multiple interacting bumps

014). (00), (015). (00), (01), (015)

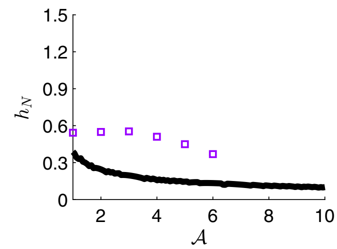
$\mathcal{A}$.

4.1 Network capacity

(.1) $(Z \equiv 0)$. $L \to \infty$ (00),

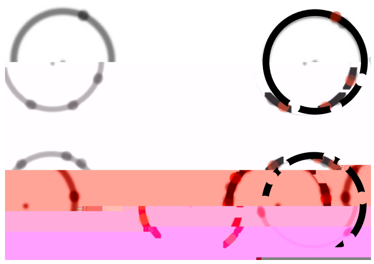
$\mathcal{A}$ $\mathcal{A}\mathcal{A}$ 4 ( )- 5

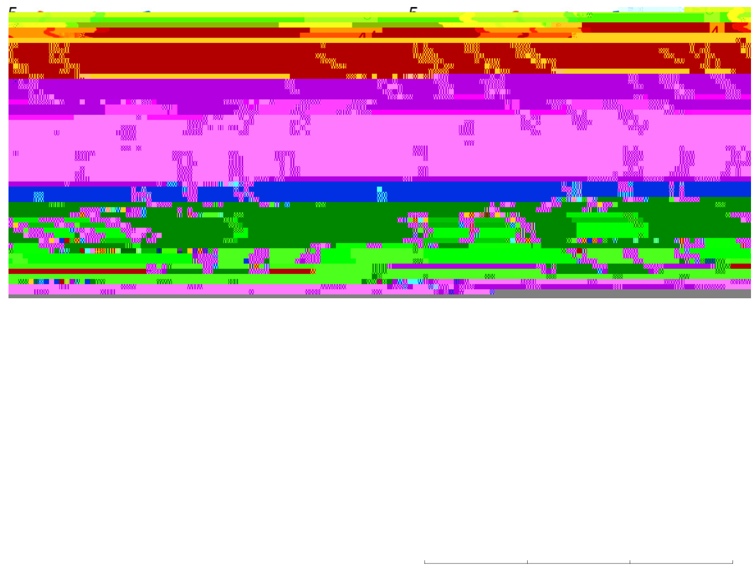
$\mathcal{A}$


1.5
1.2
0.9
0.6
0.3
0
h_N
2
4
6
8
10
$\mathcal{A}$

$h_N \quad [0, d_N / \;)$

, . (.1





1, ..., M).

$A(0) = [-b_0, -a_0] \times \{j\} \cup [a_0, b_0] \times \{k\}$,

$(W_{jk}(\ ) \equiv W_{kj}(\ ),\ j, k)$.

(5.5 ,)

$$a_1(\ ) = \frac{1}{\alpha}\Big[\theta - W(b_1 - a_1) - W_{jk}(b\ \ - a_1) + W_{jk}(a\ \ - a_1)\Big], \qquad (5.\ )$$

$$b_1(\ ) = -\frac{1}{\alpha}\Big[\theta - W(b_1 - a_1) - W_{jk}(b\ \ - b_1) + W_{jk}(a\ \ - b_1)\Big], \qquad (5.\ )$$

$$a(\ ) = \frac{1}{\alpha}\Big[\theta - W(b\ \ - a\ ) - W_{kj}$$

Acknowledgements [illegible] 140 40). [illegible] (-1 15).

Compliance with Ethical Standards

Conflict of interests [illegible]

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