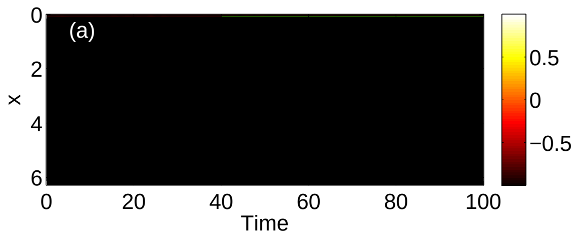
(a)
0
2
4
6
x
0
20
40
60
80
100
Time
0.5
0
−0.5

where $\delta_{i,j}$ is the Kronecker delta. Using this result and the properties of the Lorentzian $g(\eta)$ one can show that

$$\int_{-\infty}^{\infty} g(\eta)\left(C_0 + \sum_{q=1}^{n} C_q \left\{[\alpha(y,\eta,t)]^q + [\bar{\alpha}(y,\eta,t)]^q\right\}\right) d\eta$$

$$= C_0 + \sum_{q=1}^{n} C_q \left\{[z(y,t)]^q + [\bar{z}(y,t)]^q\right\} \qquad (15)$$

Thus

$$I(x,t) = \int_0^L K(x-y) H(z(y,t);n) dy \qquad (16)$$

where

$$H(z;n) = a_n \left(C_0 + \sum_{q=1}^{n} C_q (z^q + \bar{z}^q)\right) \qquad (17)$$

(It can be shown that for impulsive coupling, $H(z;\infty) = (1-|z|^2)/(1+z+\bar{z}+|z|^2)$.)

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67i
[9.90614017(7)4.43347(])-464.467