

$$\left. \begin{aligned} i' &= -200i - \frac{v}{0.05} + 2000 = f(i, v) \\ v' &= -\frac{5000}{9}v + \frac{i}{0.00002} = g(i, v) \end{aligned} \right\} \begin{aligned} w_i &= i(t_i) \\ z_i &= v(t_i) \\ a &= 0, b = 0.1; h = 5 \times 10^{-5} \end{aligned}$$

$$w_{i+1} = w_i + \frac{5 \times 10^{-5}}{12} [5f(w_{i+1}, z_{i+1}) + 8f(w_i, z_i) - f(w_{i-1}, z_{i-1})]$$

$$w_{i+1} = w_i + \frac{1}{48000} f(w_{i+1}, z_{i+1}) + \frac{5 \times 10^{-5}}{12} [8f(w_i, z_i) - f(w_{i-1}, z_{i-1})]$$

$$\theta = \frac{5 \times 10^{-5}}{12} [8f(w_i, z_i) - f(w_{i-1}, z_{i-1})]$$

$$w_{i+1} = w_i + \frac{1}{48000} [-200w_{i+1} - \frac{z_{i+1}}{0.05} + 2000] + \theta$$

$$w_{i+1} = w_i - \frac{1}{240} w_{i+1} - \frac{1}{2400} z_{i+1} + \frac{1}{24} + \theta$$

$$w_{i+1} = \frac{240}{241} w_i - \frac{1}{2410} z_{i+1} + \frac{10}{241} + \frac{240}{241} \theta$$

$$f = \frac{5 \times 10^{-5}}{12} [8f(w_i, z_i) - f(w_{i-1}, z_{i-1})]$$

$$z_{i+1} = z_i + \frac{1}{48000} [-\frac{5000}{9} z_{i+1} + \frac{w_{i+1}}{0.00002}] + f$$

$$z_{i+1} = z_i - \frac{5}{432} z_{i+1} + \frac{25}{24} w_{i+1} + f$$

$$z_{i+1} = \frac{432}{437} z_i + \frac{450}{437} w_{i+1} + \frac{432}{437} f$$

$$w_{i+1} = \frac{240}{241} w_i - \frac{1}{2410} [\frac{432}{437} z_i + \frac{450}{437} w_{i+1} + \frac{432}{437} f] + \frac{10}{241} + \frac{240}{241} \theta$$

$$w_{i+1} = \frac{240}{241} w_i - \frac{432}{1053170} z_i - \frac{450}{1053170} w_{i+1} - \frac{432}{1053170} f + \frac{10}{241} + \frac{240}{241} \theta$$

$$w_{i+1} = \frac{252760800}{253922420} w_i - \frac{432}{1053620} z_i - \frac{432}{1053620} f + \frac{10531700}{253922420} + \frac{252760800}{253922420} \theta$$