A

B

C

x = 0   0.5   1.0

D

(nseg = 1 : so the central node
is used to represent the single-segment
section)

E

x = 0   0.25   0.75   1.0

Ri_1 Ri_2 Ri_3

M_1 M_2

x = 0   0.5   1.0

Ri_1 Ri_2 Ri_3

M_1 M_2
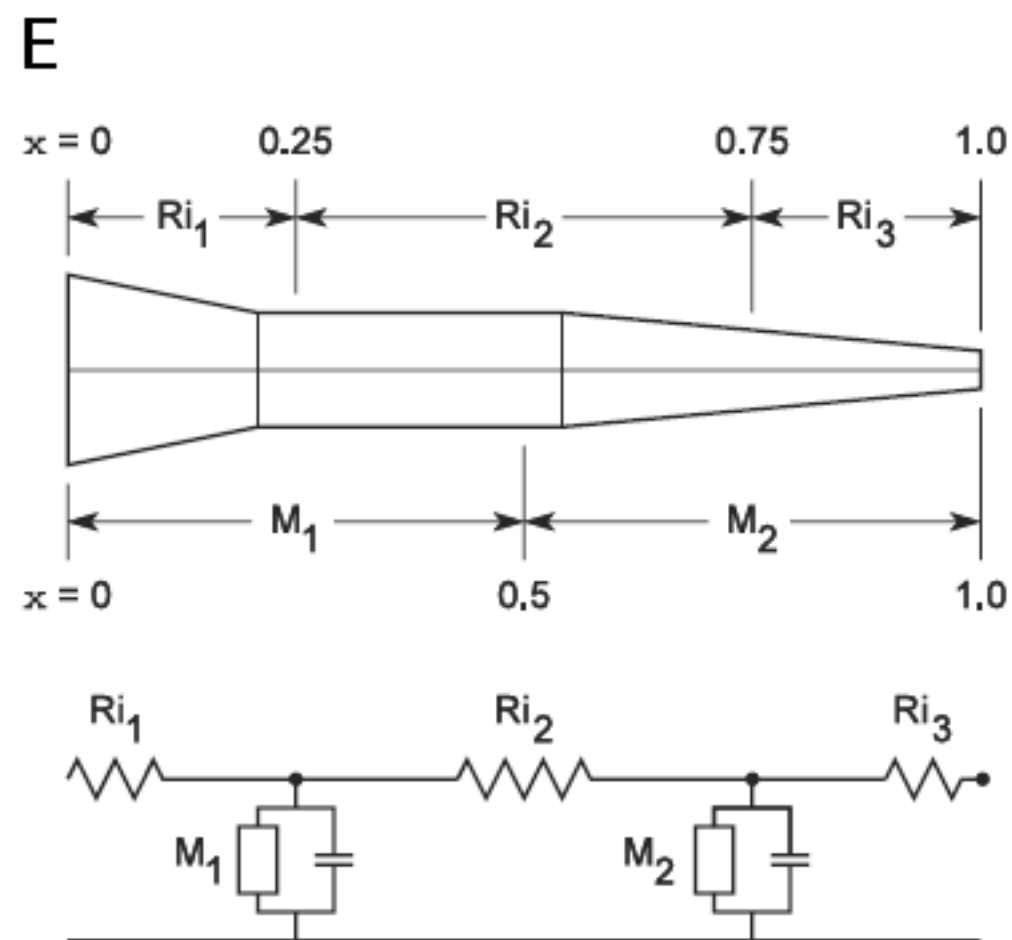
(nseg = 2 : so 2 central nodes
is used to represent the 2-segment
section) - 0.5 split the two segments.
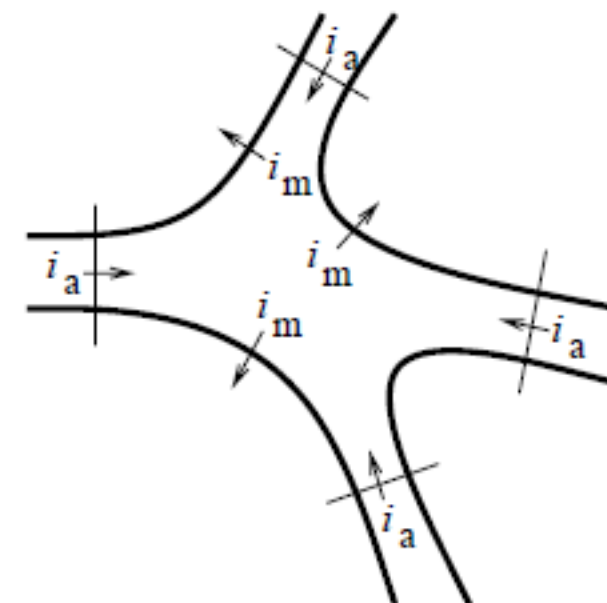
$$c_j \frac{dv_j}{dt} + i_{ion_j} = \sum_k \frac{v_k - v_j}{r_{jk}}$$

k = # of branches at the junction

(A junction as a single segment)