

a Partitioned RKM.

$$\begin{array}{c|c} c & A \\ \hline & b^T \end{array}$$

$$\longrightarrow u'(t) = v(t)$$

$$\begin{array}{c|c} c & A' \\ \hline & b'^T \end{array}$$

$$\longrightarrow v'(t) = f(t, u(t))$$

$$g_i = u_j + \tau \sum_{k=1}^l a_{ik} h_k$$

$$h_i = v_j + \tau \sum_{k=1}^l a'_{ik} f(t_j + c_k T, g_k)$$

$$u_{j+1} = u_j + \tau \sum_{i=1}^l b_i h_i$$

$$v_{j+1} = v_j + \tau \sum_{i=1}^l b'_i f(t_j + c_i T, g_i)$$

⋮

(mms)