

Supplementary Materials

Capital letters in the formulas of this paper are as follows:

$$(\sum_{i=0}^N y_i(t)U_i(u))^2 \sum_{i=0}^N z_i(t)U_i(u) = \sum_{i=0}^{3N} S_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N x_i(t)U_i(u))^2 \sum_{i=0}^N z_i(t)U_i(u) = \sum_{i=0}^{3N} A_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N z_i(t)U_i(u))^2 \sum_{i=0}^N x_i(t)U_i(u) = \sum_{i=0}^{3N} B_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N x_i(t)U_i(u))^3 = \sum_{i=0}^{3N} X_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N y_i(t)U_i(u))^2 \sum_{i=0}^N x_i(t)U_i(u) = \sum_{i=0}^{3N} C_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N q_i(t)U_i(u))^2 \sum_{i=0}^N x_i(t)U_i(u) = \sum_{i=0}^{3N} D_i(t)U_i(u) ,$$

$$\sum_{i=0}^N y_i(t)U_i(u) \sum_{i=0}^N q_i(t)U_i(u) \sum_{i=0}^N x_i(t)U_i(u) = \sum_{i=0}^{3N} E_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N x_i(t)U_i(u))^2 \sum_{i=0}^N q_i(t)U_i(u) = \sum_{i=0}^{3N} F_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N y_i(t)U_i(u))^2 \sum_{i=0}^N q_i(t)U_i(u) = \sum_{i=0}^{3N} G_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N q_i(t)U_i(u))^2 \sum_{i=0}^N y_i(t)U_i(u) = \sum_{i=0}^{3N} H_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N y_i(t)U_i(u))^3 = \sum_{i=0}^{3N} Y_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N x_i(t)U_i(u))^2 \sum_{i=0}^N y_i(t)U_i(u) = \sum_{i=0}^{3N} I_i(t)U_i(u) ,$$

$$(\sum_{i=0}^N z_i(t)U_i(u))^2 \sum_{i=0}^N y_i(t)U_i(u) = \sum_{i=0}^{3N} J_i(t)U_i(u) ,$$

$$\sum_{i=0}^N x_i(t)U_i(u) \sum_{i=0}^N y_i(t)U_i(u) \sum_{i=0}^N z_i(t)U_i(u) = \sum_{i=0}^{3N} K_i(t)U_i(u) .$$