

Motion planning and feedback control techniques with applications to long tractor-trailer vehicles

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Errata

1. In Paper E (p. 232), there are typos in equations (1d)–(1e). The correct equations read:

$$\dot{\beta}_3 = v_3 \left(\frac{\sin \beta_2 - M_1 \cos \beta_2 u}{L_2 C_1(\beta_2, \beta_3, u)} - \frac{\tan \beta_3}{L_3} \right), \quad (1d)$$

$$\dot{\beta}_2 = v_3 \left(\frac{u - \frac{\sin \beta_2}{L_2} + \frac{M_1}{L_2} \cos \beta_2 u}{C_1(\beta_2, \beta_3, u)} \right). \quad (1e)$$

2. In Paper E (p. 235), there are typos in equations (7d)–(7e). The correct equations read:

$$\begin{aligned} \dot{\tilde{\beta}}_3 &= v_3 \left(\frac{\sin(\tilde{\beta}_2 + \beta_{2r}) - M_1 \cos(\tilde{\beta}_2 + \beta_{2r})(\tilde{u} + u_r)}{L_2 C_1(\tilde{\beta}_2 + \beta_{2r}, \tilde{\beta}_3 + \beta_{3r}, \tilde{u} + u_r)} - \frac{\tan(\tilde{\beta}_3 + \beta_{3r})}{L_3} \right. \\ &\quad \left. - \frac{\cos \tilde{\theta}_3}{1 - \kappa_{3r} \tilde{z}_3} \left[\frac{\sin \beta_{2r} - M_1 \cos \beta_{2r} u_r}{L_2 C_1(\beta_{2r}, \beta_{3r}, u_r)} - \kappa_{3r} \right] \right), \end{aligned} \quad (7d)$$

$$\begin{aligned} \dot{\tilde{\beta}}_2 &= v_3 \left(\left[\frac{\tilde{u} + u_r - \frac{\sin(\tilde{\beta}_2 + \beta_{2r})}{L_2} + \frac{M_1}{L_2} \cos(\tilde{\beta}_2 + \beta_{2r})(\tilde{u} + u_r)}{C_1(\tilde{\beta}_2 + \beta_{2r}, \tilde{\beta}_3 + \beta_{3r}, \tilde{u} + u_r)} \right] \right. \\ &\quad \left. - \frac{\cos \tilde{\theta}_3}{1 - \kappa_{3r} \tilde{z}_3} \left[\frac{u_r - \frac{\sin \beta_{2r}}{L_2} + \frac{M_1}{L_2} \cos \beta_{2r} u_r}{C_1(\beta_{2r}, \beta_{3r}, u_r)} \right] \right). \end{aligned} \quad (7e)$$

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