List of errors for
Stability of Linear and Non-Linear Kalman Filters[*]

p. 20 — Figure 4.1 should have $\mathbf{q}_{k-2}$, $\mathbf{q}_{k-1}$ and $\mathbf{q}_k$ instead of $\mathbf{q}_{k-1}$, $\mathbf{q}_k$ and $\mathbf{q}_{k+1}$.

pp. 23–24 — On p. 23 the observability Gramian of the system in (4.1) should have $\mathbf{R}^{-1}$ instead of $\mathbf{R}_i^{-1}$. Similar error is found on p. 24 in the corresponding observability matrix.

p. 37 — The part of Theorem 4.15 relating to the convergence of means is somewhat dubious.

p. 48 — The last inequality of the page should have $\mathbf{\Pi}_k$ on its right-hand side.

p. 49 — The last series of inequalities of the page should have

$$2\kappa' \|\boldsymbol{\xi}_k\|^3 \frac{1}{p_1} \left(f + \frac{f p_2 h^2}{\hat{r}} \right) + \frac{1}{p_1}(\kappa')^2 \varepsilon' \|\boldsymbol{\xi}_k\|^3$$

instead of

$$2\kappa' \|\boldsymbol{\xi}_k\|^3 \left(f + \frac{f p_2 h^2}{p_1 \hat{r}} \right) + \frac{1}{p_1}(\kappa')^2 \varepsilon' \|\boldsymbol{\xi}_k\|^3 .$$

p. 49 — Equation (5.15) should read

$$\kappa_{\text{nonl}} = \kappa' \frac{1}{p_1} \left(2 \left(f + \frac{f p_2 h^2}{\hat{r}} \right) \kappa' \varepsilon' \right) .$$

p. 57 — The last inequality of the page should have $\mathbf{P}_{k+1}^-$ instead of $\mathbf{P}_{k+1}$ on its left-hand side.

p. 79 — The right-hand side of (6.3) should have $d(\mu, \nu)$ instead of $d(\mu - \nu)$.

[*]Karvonen (2014). *Stability of Linear and Non-Linear Kalman Filters*. Master's thesis. Department of Mathematics and Statistics, University of Helsinki. http://hdl.handle.net/10138/144334