Corrigenda

Reachability Analysis of Nonlinear Systems Using Matrix Measures IEEE Transactions on Automatic Control, vol. 60, no. 1, January 2015

John Maidens

July 14, 2015

In the tunnel diode oscillator example problem from Section V.A, the expression for $\mu_2(J(V_d))$ given at the bottom of the page is incorrect. The expression to the right of the equality describes the spectral abscissa rather than the matrix measure. The correct expression should read

$$\mu_2(J(V_d)) = -\frac{R}{2L} - \frac{1}{2C}I'_d(V_d) + \frac{1}{2}\sqrt{\left(\frac{R}{L} + \frac{1}{C}I'_d(V_d)\right)^2 - \left(\frac{2}{LC} - \frac{1}{L^2} - \frac{1}{C^2} + \frac{4R}{LC}I'_d(V_d)\right)}.$$

Acknowledgements

We wish to thank Yichen Zhang from the University of Tennessee, Knoxville for bringing this error to our attention.