

Typo List – Math II

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Typo Lists¹

1. Page 8

- (a) “ $> 0; \hat{x} = 0$ is a global” should be “ $> 0; (3)\hat{x} = 0$ is a global”

2. Page 16

- (a) “orthogonal to the line through \hat{x} and \hat{x} ” should be “orthogonal to the line through \hat{x} and p ”

3. Page 21

- (a) “ $(1, 1) =$ ” should be “ $(1, 0) +$ ”
(b) “ $-2 + \frac{2}{5}\sqrt{5}$ ” should be “ $-3 + \frac{2}{5}\sqrt{5}$ ”

4. Page 29

- (a) “the transversality condition $\hat{p}(t_1) = -\lambda_0 \hat{\kappa}'(t_1)$ ” should be “the transversality condition $\hat{p}(t_1) = -\hat{\lambda}_0 \kappa'(\hat{x}(t_1))$ ”

5. Page 31

- (a) “we choose $h(\cdot)$ and c such that $\dot{h}(t) = \hat{f}_{\hat{x}}(t) + \int_t^{t_1} \hat{L}_x(\tau) d\tau - c$ ” should be “we choose $h(\cdot)$ and c such that $\dot{h}(t) = \hat{L}_{\hat{x}}(t) + \int_t^{t_1} \hat{L}_x(\tau) d\tau - c$ ”
(b) “the transversality condition $\hat{L}_{\hat{x}}(t_1) = -\hat{\kappa}'(t_1)$ ” should be “the transversality condition $\hat{L}_{\hat{x}}(t_1) = -\kappa'(\hat{x}(t_1))$ ”

6. Page 32

- (a) “ $\dot{\hat{p}}(t_1) = -\hat{\kappa}'(\hat{x}(t_1))$ ” should be “ $\hat{p}(t_1) = -\hat{\lambda}_0 \kappa'(\hat{x}(t_1))$ ”
(b) “That is, we take $\phi(k, x, u) = x - u$ ” should be “That is, we take $\phi(k, x, u) = u$ ”

7. Page 33

- (a) “ $\hat{H}_k = \max_{u_k \in U} J_k(\hat{x}_k, u_k, \hat{p}_k)$ ” should be “ $\hat{H}_k = \max_{u_k \in U} H_k(\hat{x}_k, u_k, \hat{p}_k)$ ”

8. Page 47

¹We are not so sure about 4(a),5(b),6(a)(b) typos, specially 6(a)(b) since we change two theorems a little bit.

- (a) “**Upper hemicontinuity**...and every sequence $\{x_n\}$ with $y_n \in \Gamma(y_n)$ ”
should be “**Upper hemicontinuity**...and every sequence $\{x_n\}$ with
 $x_n \in \Gamma(y_n)$ ”
- (b) “**Lower hemicontinuity**...if for every sequence $y_n \rightarrow y$ ” should be
“**Lower hemicontinuity**...if for every sequence $y_n \rightarrow y$ ”