Lectures on Partial Hyperbolicity and Stable Ergodicity

ERRATA

p. 8, l. 7 and 12 – replace $X(t)$ with $X(x)$.

p. 12, l. 15 should be $c^2(1-\frac{\lambda}{\lambda'}^2)^{-1}\|v\|_x\|w\|_x < \infty$.

and l. 18 should be $c^2(1-\frac{\mu'}{\mu}^2)^{-1}\|v\|_x\|w\|_x < \infty$.

p. 13 – formula (2.5) should be

$$\begin{aligned}\lambda_1\|v\| \le \|dfv\| \le \mu_1\|v\|, \quad v \in E_1(x),\\ \lambda_2\|v\| \le \|dfv\| \le \mu_2\|v\|, \quad v \in E_2(x).\end{aligned}$$

p. 14 – formula (2.8) should be

$$\begin{aligned}\lambda_1\|v\| \le \|dfv\| \le \mu_1\|v\|, \quad v \in E^s(x),\\ \lambda_2\|v\| \le \|dfv\| \le \mu_2\|v\|, \quad v \in E^c(x),\\ \lambda_3\|v\| \le \|dfv\| \le \mu_3\|v\|, \quad v \in E^u(x).\end{aligned}$$

p. 16, l. 13 – erase: "where g_t is the geodesic flow"

p. 18 – l. -10 and -8 – replace $\mu \in Q$ with $\mu \in \partial Q$

p. 19, l. 12 – should be $\lambda\mu \in \partial Q$.

l. 20 and 22 should be $\|f_*^v\|$.

p. 20, l. 4 – the number m in the sum should be replaced by $m-1$.

p. 22, l. -8 and p. 23, l. 6 – replace A with $\tilde{A}$.

p. 43, l. 2 – replace $B^s(r_0) \times B^s(r_0)$ with $B^s(r_0) \times B^u(r_0)$.

p. 47 – formula (5.2) should be

$$\begin{aligned}\lambda_1\|v\| \le \|dfv\| \le \mu_1\|v\|, \quad v \in E^s(x),\\ \lambda_2\|v\| \le \|dfv\| \le \mu_2\|v\|, \quad v \in N,\\ \lambda_3\|v\| \le \|dfv\| \le \mu_3\|v\|, \quad v \in E^u(x).\end{aligned}$$

p. 50, l. -13 – replace N_g with N_T.

p. 52, l. 2 – replace T_xB with T_zB.

p. 53, l. -9, -6 and -2 – replace $B^{cs}(x,r)$ with $W^{cs}(x,r)$.

p. 54, l. 23 – in the displayed formula replace ν with ν^{-1}.

p. 75, l. 13 – replace $\lambda_2^{\beta_0}$ with $\lambda_2^n\beta_0$.

p. 85, l. -3 – before "By absolute continuity" insert the following sentence:

"Similarly, $\varphi^-(x) = \varphi^-(z)$ for every $z \in V^u(x)$."

p. 86, l. 3 – replace the first displayed formula with

$$\bar{\varphi}(y) = \varphi^-(y) = \varphi^-(z) = \varphi^+(z) = \varphi^+(x) = \bar{\varphi}(x).$$

l. 20 – replace $g_t(x)$ with $(g_t(x), t)$.

last line – replace 8.3 with 10.3.

p. 91, l -5 – replace "smallest" with "largest".

p. 103, l.-4 – should be "Kuranishi"

p. 108 – before Theorem 9.1 add the following definition of dynamical coherence:

A partially hyperbolic diffeomorphism f is said to be dynamically coherent if its central distribution E^c is integrable to a foliation W^c and so are the distributions $E^{cs} = E^c \oplus E^s$ and $E^{cu} = E^c \oplus E^u$. It is also assumed that the corresponding center-stable and center-unstable foliations W^{cs} and W^{cu} are sub-foliated by leaves of the central foliation.

p. 109 – in formulas on lines 22 and 23 insert $k = 0, 1, \ldots, n-1$ in the end of the definitions of the sets

p. 112, l.-13 – erase "$\mathrm{Diff}^2(M \times S^1)$ or"