

# ERRATA

Corrections to

## ORDERED GLEASON PARTS

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The author is indebted to Professor Miroslav Dont, of Charles University, Prague, for pointing out the following errors. Professor Dont will publish his results in *Časopis pro pěstování matematiky*.

In §4, p. 346, we attribute to Pini and Hadamard the following Harnack inequality for solutions of the heat equation: if  $(x_1, t_1), (x_2, t_2)$  are interior points of  $X$ , and  $t_1 \leq t_2$ , then there is a constant  $M$  such that for every positive parabolic function  $u$ ,  $u(x_1, t_1) \leq Mu(x_2, t_2)$ . The author mistranslated Pini's paper: the theorem requires  $t_1 < t_2$ , and Dont shows by example that  $t_1 < t_2$  is in fact necessary. Hence the Gleason parts for the space of parabolic functions are singletons. The statements throughout the paper which refer to the ordering  $\leq$  for the parabolic functions need appropriate modification, and Theorems 13 and 14 are not correct as they stand.

The theorem of §3 can be strengthened (simply by reading the proofs more carefully) so that applications to the heat equation remain. We indicate the general changes below. To see what is happening in the special case where  $B$  is the space  $B_p$  of parabolic functions on

$$X = \{(x, t): a \leq t \leq b, \varphi_1(t) \leq x \leq \varphi_2(t)\}$$

and  $p_0$  is an interior point of the top horizontal segment in  $X$ , keep in mind that  $X(p_0) = X^0 \cup \{p_0\}$ .

In Theorem 6, replace the last sentence by: " $\mathcal{S} = \mathcal{S}_p$  on a subset  $Y$  of  $X(p_0)$  if and only if  $B^+(p_0)$  is equicontinuous on  $Y$ ." A similar change holds in Corollary 2 to Theorem 7. If  $B = B_p$ , then  $B^+(p_0)$  is not equicontinuous at  $p_0$ , but is equicontinuous on  $X(p_0) - \{p_0\} = X^0$ .

In Theorem 8 replace " $X(p_0)$ " by " $Y$ ", where  $Y$  is any open set contained in  $X(p_0)$ .

In the paragraph preceding Theorem 9 add the definition:  $\hat{B}(Y)$  is the closure of  $B|Y$  in the topology of uniform convergence on compact subsets of  $Y$ , where  $Y$  is a subset of  $X(p_0)$ . In Theorem 9 the hypothesis can be changed to read " $B^+(p_0)$  is equicontinuous on the open subset  $Y$  of  $X(p_0)$ ", and the conclusion to " $Q(\cdot, \theta) \in \hat{B}(Y)$ ". If  $B = B_p$ , this implies that  $Q(\cdot, \theta)$  is parabolic on  $X^0$ , and Theorem 13, with " $X$ " replaced by " $X^0$ " both times, follows from the above version of Theorem 9.