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CORRECTION

ASYMPTOTIC LOCAL MINIMAXITY IN SEQUENTIAL POINT ESTIMATION

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There are some errors in the proof of Lemma 2, although the lemma itself is correct as stated. The errors involve the definitions of the quantities W_n and $\overline{R}_A$, just before formula (23). Correct definitions are

$$W_n(A, \overline{X}_n, \pi_n^*) = E^{\pi}\{A\gamma_0^2(\omega)(\theta - \overline{X}_n)^2 | X_1, \dots, X_n\},$$

$$\overline{R}_A(\overline{X}_n; \pi_n^*) = \text{ess} \inf_{t>n} E^{\pi}\{A\gamma_0^2(\omega)(\theta - \overline{X}_t)^2 + t - n | X_1, \dots, X_n\}.$$

With these changes, formula (23) is correct.

The change in the definition of W_n requires no additional change in the remainder of the proof. The inequality asserted for $\overline{R}_A$ following (23) must be changed to

$$\overline{R}_A(\overline{X}_n; \pi_n^*) \leq \tfrac{1}{2} W_n(A, \overline{X}_n, \pi_n^*) + 4\sqrt{A}\,B + 1$$

w.p.1 for all $n \leq A^{1/4}$ and all sufficiently large A. This follows by replacing the essential infimum over t by $t = n + m$ with $m = [\sqrt{A}\,] + 1$, writing $(\overline{X}_{n+m} - \theta)^2 \leq \frac{1}{2}(\overline{X}_n - \theta)^2 + 2(\overline{X}_{n,m} - \theta)^2$ for $n \leq A^{1/4}$ and large A, where $\overline{X}_{n,m}$ denotes the average of $X_{n+1}, \dots, X_{n+m}$, and bounding the expectations as in the paper. As in the paper, it then follows that $\{s = n\} \subseteq \{W_n \leq 8\sqrt{A}\,B + 2\}$ and, therefore, that $s \geq N_A$ w.p.1 for all large A. The remainder of the proof is unaffected.

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