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EXAMPLE PAPER FOR AISM SPECIAL ISSUE ON FRONTIER OF TIME SERIES MODELING

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1. Introduction

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2. Equations, Detfinition, Lemma and Theorem

2.1 *Example of Equations*

Consider a nonlinear non-Gaussian state space model for time series y_n,

$$x_n = F_n(x_{n-1}, v_n) \tag{2.1}$$

$$y_n = H_n(x_n, w_n), \tag{2.2}$$

where x_n is an unknown state vector, v_n and w_n are the system noise and the observation noise with densities $q_n(v)$ and $r_n(w)$, respectively.

2.2 *Examples of Definition and Remark*

DEFINITION 2.1. A population π_i is considered as the best σ-qualified, if it simultaneously satisfies the following conditions:
(i) $\pi_i \in S$,
(ii) $\theta_i \geq \theta_0$ and
(iii) $\theta_i = \max_{\pi_j \in S} \theta_j$.

Remark 1. You can write remark here.

2.3 *Examples of Lemma and Theorem*

LEMMA 2.3.1. *Let S_n be a random variable having a $\chi^2(n)$ distribution. Then we have* $\cdots$.

PROOF. Proof is not shown here.

THEOREM 2.3.1. *Assume $\sigma_i^2 \neq \sigma_0^2$, for all $i = 1, \ldots, k$. The empirical Bayes selection rule $d^{*n}(x)$, defined in* (3.7) *and* (3.8), *is asymptotically optimal with convergence rate of order $O(\ln^2 n/n)$. That is*

$$E_n[r(d^{*n})] - r(d^B) = O(\ln^2 n/n).$$

PROOF. Proof is not shown here.

3. Table and Figure

3.1 *Table*

Table 1. Table caption should be given here.

Order	AIC
1	35.4
2	21.6
3	13.4
4	11.6
5	12.2
6	13.8

3.2 *Figure*

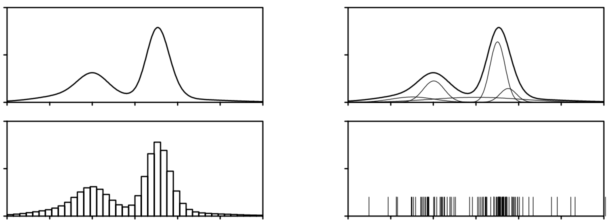

Fig. 1. Figure caption should be given here.

Fig. 2. Figure caption should be given here.

4. Conclusion

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Refernces

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