

Institute of Mathematical Statistics
LECTURE NOTES–MONOGRAPH SERIES

Model Selection

Edited by P. Lahiri

Volume 38

Institute of Mathematical Statistics
LECTURE NOTES–MONOGRAPH SERIES
Volume 38

Model Selection

Edited by P. Lahiri

Institute of Mathematical Statistics
Beachwood, Ohio

Institute of Mathematical Statistics
Lecture Notes-Monograph Series

Series Editor:
Joel Greenhouse

**The production of the *IMS Lecture Notes-Monograph Series* is
managed by the IMS Business Office: Julia A. Norton, IMS
Treasurer, and Elyse Gustafson, IMS Executive Director.**

Library of Congress Control Number: 2001 135412

International Standard Book Number 0-940600-52-8

Copyright © 2001 Institute of Mathematical Statistics

All rights reserved

Printed in the United States of America

TABLE OF CONTENTS

PREFACE

On Model Selection		1
<i>C. R. Rao and Y. Wu</i>		
Discussion	<i>Sadanori Konishi</i>	58
Discussion	<i>Rahul Mukerjee</i>	60
Rejoinder	<i>C. R. Rao and Y. Yu</i>	64
The Practical Implementation of Bayesian Model Selection		65
<i>Hugh Chipman, Edward I. George and Robert E. McCulloch</i>		
Discussion	<i>M. Clyde</i>	117
Discussion	<i>Dean P. Foster and Robert A. Stine</i>	124
Rejoinder	<i>Hugh Chipman, Edward I. George and Robert E. McCulloch</i>	131
Objective Bayesian Methods for Model Selection: Introduction and Comparison		135
<i>James O. Berger and Luis R. Pericchi</i>		
Discussion	<i>J. K. Ghosh and Tapas Samanta</i>	194
Discussion	<i>Fulvio De Santis</i>	197
Rejoinder	<i>James O. Berger and Luis R. Pericchi</i>	203
Scales of Evidence for Model Selection: Fisher versus Jeffreys		208
<i>Bradley Efron and Alan Gous</i>		
Discussion	<i>R. E. Kass</i>	246
Discussion	<i>G. S. Datta and P. Lahiri</i>	249
Rejoinder	<i>Bradley Efron and Alan Gous</i>	254

