Proceedings of the Second Workshop on BACKGROUNDS AT THE MACHINE DETECTOR INTERFACE



World Scientific

15

BIBLIOTHEQUE DU CERIST

IST 2875

- -

BIBLIOTHEQUE DU CERIST

ŕ

BACKGROUNDS AT THE MACHINE DETECTOR INTERFACE

BIBLIOTHEQUE DU CERIST

Proceedings of the Second Workshop on

BACKGROUNDS AT THE MACHINE DETECTOR INTERFACE

Honolulu, Hawaii 21–22 March 1997

Editors

T E Browder S K Sahu



Published by

World Scientific Publishing Co. Pte. Ltd.
P O Box 128, Farrer Road, Singapore 912805
USA office: Suite 1B, 1060 Main Street, River Edge, NJ 07661
UK office: 57 Shelton Street, Covent Garden, London WC2H 9HE

British Library Cataloguing-in-Publication Data A catalogue record for this book is available from the British Library.

1193

Proceedings of the Second Workshop on BACKGROUNDS AT THE MACHINE-DETECTOR INTERFACE

Copyright © 1998 by World Scientific Publishing Co. Pte. Ltd.

All rights reserved. This book, or parts thereof, may not be reproduced in any form or by any means, electronic or mechanical, including photocopying, recording or any information storage and retrieval system now known or to be invented, without written permission from the Publisher.

For photocopying of material in this volume, please pay a copying fee through the Copyright Clearance Center, Inc., 222 Rosewood Drive, Danvers, MA 01923, USA. In this case permission to photocopy is not required from the publisher.

ISBN 981-02-3222-5

This book is printed on acid-free paper.

CONTENTS

Overview of the IInd Workshop On Backgrounds at	
the Machine Detector Interface	1
T.E. Browder and S.K. Sahu	
Beam Backgrounds at CLEO: Design and Performance	
of the CESR High Luminosity Interaction Region	6
S. Henderson	
SLAC B-Factory Background Commissioning	42
T. L. Geld	
A Mini-TPC for PEP-II Commissioning	49
R. Cizeron, V. Lepeltier, A.M. Lutz, S. Sen, G. Wormser, T. Geld,	
B. Meadows, M. Sokoloff and M. Ronan	
A CsI Scanning Ring for PEPII Commissioning	57
S. Emery	
Machine Backgrounds at DAΦNE	68
S. Guiducci	
Backgrounds and Masking at BTCF	84
D. Zhang	
A Generator for Study of Background Due to Beam-Gas	
Interaction at KEK-B Factory	106
S. K. Sahu	
Development of Radiation-hardened CMOS VLSI	137
H. Tajima	
Studies on the Vertex Tracker Design and	
Backgrounds at the High Energy e^+e^- Linear Collider	144
M. Battaglia, A. Andreazza, M. Caccia and V. Telnov	
Pixel Detectors in a B-Factory Environment and	
Thoughts on use in BELLE	162
G. S. Varner and S. K. Sahu	
Estimation of Beam-Background Tracks in the BELLE	
CDC using GELHAD	181
S. Uehara	
Brief Report on a Radiation Monitor	191
I. Fukunishi and T. Tsuboyama	
Machine-Background Simulations for BaBar	196
D. Kirkby	
A Diode Detector for PEP-II Commissioning	213
D. Kirkby	
Simulation of Electro-production Backgrounds	226
A. Snyder	