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OFFICE OF NAVAL RESEARCH

FINAL REPORT

for

Grant Number N00014-92-J-1557

NATO ADVANCED RESEARCH WORKSHOP

FRONTIERS OF OPTICAL PHENOMENA IN SEMICONDUCTOR STRUCTURE
OF REDUCED DIMENSION

July 27-31, 1992
Yountville, California

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FINAL REPORT

The NATO Advanced Research Workshop on "Frontiers of Optical Phenomena in Semiconductor Structures of Reduced Dimensions" provided a forum in which experimental and theoretical physicists discussed and evaluated recent developments in the optical research of the exciting new phenomena that occur in the electron systems of semiconductor nanostructures. The topics of principal interest to the participants included the integral and fractional quantum Hall effects, the non-linear optics of low dimensional electron systems, the optical responses associated with electrons in quantum wires and dots and the optical characterization of electron tunneling in ultra-small structures. We also had informative presentations on recent developments in the studies of optically active porous silicon and the optical properties of C₆₀ molecules. The papers presented at the Workshop are to appear in a Proceedings being published by Kluwer, Dordrecht, The Netherlands. Three copies of the Proceedings will be provided to ONR.

The Financial Report on the Funds provided by ONR via Grant N00014-92-J1557 to the University of Pennsylvania, which contains the names of the American participants who received support and the amounts provided, is attached.

The list of participants who attended the Workshop is given in the Annex (Appendix).

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NATO Advanced Research Workshop

Frontiers of Optical Phenomena in Semiconductor Structures of Reduced Dimensions

Financial Report on Funds provided by ONR through grant N00014-92-J-1557
to the University of Pennsylvania under the direction of Professor Eli Burstein

Partial Travel Support:

D. Awschalom: University of California	\$250.00
E. Burstein: University of Pennsylvania	\$250.00
D.S. Chemla: Lawrence Berkley Laboratory	\$350.00
B.I. Halperin: Harvard University	\$200.00
C. Kane: University of Pennsylvania	\$550.00
E.E. Mendez: T.J. Watson Research Center	\$250.00
R. Merlin: University of Michigan	\$591.00
A.V. Nunmikko: Brown University	\$50.00
A. Pinczuk: AT&T Bell Laboratories	\$300.00
E.H. Rezayi: California State University	\$250.00
J. Shah: AT&T Bell Laboratories	\$250.00
L.J. Sham: University of California	\$591.00
D.J. Steel: University of Michigan	\$591.00
J. Weiner: AT&T Bell Laboratories	\$300.00
	<u>\$4,773.00</u>

Administrative Costs

Telephone and Copying	<u>\$227.00</u>
TOTAL	\$5,000.00

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