ADVANCES IN CRYPTOLOGY

Proceedings of Crypto 83

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CRYPTO 83

A Workshop on the Theory and Application of Cryptographic Techniques

held at the University of California, Santa Barbara

August 22-24, 1983

Sponsored by

The International Association for Cryptologic Research

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Preface

An international community of researchers is now flourishing in the area of cryptology—there was none half-a-dozen years ago. The intrinsic fascination of the field certainly is part of the explanation. Another factor may be that many sense the importance and potential consequences of this work, as we move into the information age. I believe that the various meetings devoted to cryptology over the past few years have contributed quite significantly to the formation of this community, by allowing those in the field to get to know each other and by providing for rapid exchange of ideas.

CRYPTO 83 was once again truly the cryptologic event of the year. Many of the most active participants continue to attend each year, and attendance continues to grow at a healthy rate. The informal and collegial atmosphere and the beach side setting which contribute to the popularity of the event were again supported by flawless weather. The absence of parallel sessions seemed to provide a welcome opportunity to keep abreast of developments in the various areas of activity.

Each session of the meeting organized by the program committee is represented by a section in the present volume. The papers were accepted by the program committee based on abstracts, and appear here without having been otherwise refereed. The last section contains papers presented at the informal rump session. A keyword index and an author index to the papers is provided at the end of the volume.

At CRYPTO 82 I proposed the formation of an International Association for Cryptologic Research to organize meetings and keep its members informed of events in the field. The association has taken the form of a non-profit corporation which held its first business meeting at CRYPTO 83. The attendees elected officers, a newsletter editor was selected, and plans were laid for EUROCRYPT 84 in Paris and CRYPTO 84 in Santa Barbara.

Many thanks are due the authors for their timely submission of papers, and to Ron Rivest and Alan Sherman for all their work in setting up the proceedings of CRYPTO 82.

Santa Barbara, California
January 1984

D.C.

CONTENTS

SESSION I: ALGORITHMS AND THEORY

Knapsack Public Key Cryptosystems and Diophantine Approximation (Extended Abstract)	3
<i>J.C. Lagarias</i>	
Solving Low Density Knapsacks	25
<i>Ernest F. Brickell</i>	
Evaluation of the Adleman Attack on Multiply Iterated Knapsack Cryptosystems (Abstract)	39
<i>E.F. Brickell, J.C. Lagarias, and A.M. Odlyzko</i>	
On the Power of Cascade Ciphers (Extended Abstract)	43
<i>S. Even and O. Goldreich</i>	
The Prisoners' Problem and the Subliminal Channel	51
<i>Gustavus J. Simmons</i>	

SESSION II: MODES OF OPERATION

An Overview of Factoring	71
<i>H.C. Williams</i>	
New Ideas for Factoring Large Integers	81
<i>Carl Pomerance, J.W. Smith, and S.S. Wagstaff, Jr.</i>	
Factoring Numbers on the Massively Parallel Computer	87
<i>Marvin C. Wunderlich</i>	

Factorization Using the Quadratic Sieve Algorithm.....	103
<i>J.A. Davis and D.B. Holdridge</i>	

SESSION III: PROTOCOLS AND TRANSACTION SECURITY

Signatures through Approximate Representations by Quadratic Forms (Extended Abstract)	117
<i>H. Ong and C.P. Schnorr</i>	
A Simple Protocol for Signing Contracts	133
<i>Oded Goldreich</i>	
Reducibility among Protocols (Extended Abstract)	137
<i>Manuel Blum, Umesh V. Vazirani, and Vijay V. Vazirani</i>	
How to Exchange Half a Bit	147
<i>Tom Tedrick</i>	
Blind Signature System (Abstract).....	153
<i>David Chaum</i>	

SESSION IV: APPLICATIONS

A Layered Broadcast Cryptographic System.....	157
<i>M.E. Spencer and S.E. Tavares</i>	
Analytical Characteristics of the DES	171
<i>Marc Davio, Yvo Desmedt, Marc Fosséprez, René Govaerts, Jan Hulsbosch, Patrik Neutjens, Philippe Piret, Jean-Jacques Quisquater, Joos Vandewalle, and Pascal Wouters</i>	
Producing a One-Way Hash Function from DES	203
<i>Robert S. Winternitz</i>	
On the Security of Compressed Encodings	209
<i>Selim G. Akl</i>	

Field Encryption and Authentication	231
<i>Dorothy E. Denning</i>	
Shift-Register Synthesis (Modulo m) (Abstract)	249
<i>J.A. Reeds and N.J.A. Sloane</i>	

SESSION V: SPECIAL SESSION ON CRYPTANALYSIS

Probabilistic Analysis and Performance Modelling of the ‘Swedish’ Algorithm and Modifications	253
<i>Joel E. Sachs and Shimshon Berkovits</i>	
A Subexponential-Time Algorithm for Computing Discrete Logarithms over $GF(p^2)$	275
<i>Taher ElGamal</i>	
Permutation Polynomials in RSA-Cryptosystems	293
<i>Rudolf Lidl and Winfried B. Müller</i>	
Some Results on the Information Theoretic Analysis of Cryptosystems	303
<i>H. Jürgensen and D.E. Matthews</i>	

RUMP SESSION: IMPROMPTU TALKS

Improving the Security of Exponential Key Exchange	359
<i>Bahaa W. Fam</i>	
RSA Bits Are $732 + \epsilon$ Secure (Preliminary Abstract)	369
<i>Umesh V. Vazirani and Vijay V. Vazirani</i>	
Use of the ‘Signature Token’ to Create a Negotiable Document	377
<i>Donald W. Davies</i>	

Electronic Wallet	383
<i>Shimon Even and Oded Goldreich</i>	
Design Concepts for Tamper Responding Systems.....	387
<i>David Chaum</i>	
Author Index.....	393
Subject Index.....	395