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Proceedings

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Preface

The 5th Africacrypt conference was held July 10–12, 2012 in Ifrane, Morocco. It followed previous editions in Casablanca, Morocco (2008), Gammarth, Tunisia (2009), Stellenbosch, South Africa (2010), and Dakar, Senegal (2011).

The goal of the conference is to present research advances in the area of cryptography. It aims at bringing together in a friendly atmosphere researchers from all countries, beyond borders and political issues.

The conference received 56 submissions. They went through a doubly anonymous review process aided by 42 Program Committee members and 54 external reviewers. Our submission software invited authors to indicate from which continent they were. We counted 12 papers with at least one co-author from Africa.

Our invited talks were given by:

- Willi Meier (University of Applied Sciences and Arts Northwestern Switzerland) - *Stream Ciphers, A Perspective*
- Craig Gentry (IBM) - *Fully Homomorphic Encryption: Current State of the Art*
- Marc Fischlin (The Darmstadt University of Technology, Germany) - *Black-Box Reductions and Separations in Cryptography*

This volume represents the revised version of the 24 accepted contributed papers which were presented at the conference along with abstracts of invited speakers.

The Program Committee selected a paper to award. Committee members were invited to oppose to nominated papers and to vote on remaining ones. After this selection, the Program Committee decided to give the Africacrypt 2012 Best Paper Award to Elena Andreeva, Bart Mennink, Bart Preneel, and Marjan Skrobot for their paper:

“Security Analysis and Comparison of the SHA-3 Finalists BLAKE, Groestl, JH, Keccak, and Skein”

The submission and review process was done using the *iChair* Web-based software system developed by Thomas Baignères and Matthieu Finiasz.

We would like to thank the authors of all submitted papers. Moreover, we are indebted to the members of the Program Committee and the external sub-reviewers for their diligent work. We would also like to acknowledge the conference organizers and the Steering Committee for supporting us and for the excellent collaboration we had.

Finally, we heartily thank the sponsors of Africacrypt 2012 for their generous support.

Aikaterini Mitrokotsa
Serge Vaudenay

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