Computer Algebra in Coding Theory and Cryptography

Special Session at the 20th International Conference on Applications of Computer Algebra 2014.

http://faculty.fordham.edu/rlewis/aca2014/

Fordham University
July 9th – 12th, 2014, New York City, USA.

Call For Papers and Participation

This is the nineth edition of this well stablished special session at ACA conference devoted to providing a forum for exchange of ideas and research results related to Computer Algebra, both theoretical and algorithmic treatment of all kinds of symbolic objects, in application to Coding Theory and Cryptography.

Session topics will include (but are not limited to) the following:

Computer Algebra in Coding Theory

Applications of the methods of applied algebraic geometry to coding theory including decoding algorithms, combinatorial constructions of codes, search of optimal codes ...

Computer Algebra in Cryptography

Algebraic cryptoanalysis. Post quantum, hash-based and lattice-based cryptography. Multivariate PKC...

Interactions between Coding, Crypto and C.A.

Secret sharing schemes. Steganography. Code-based cryptography...

It is planned to have 12 1/2 hour contributed talks in the session. Submissions of 2-page extended abstracts should be sent to the session organizers following the ACA 2014 deadline guidelines. The submitted extended abstracts will be reviewed for soundness and relevance to the session. Authors of the extended abstracts accepted will be invited to submit their full revised papers for publication in a special issue of some mayor journal related to the topic.

Check ACA2014 and the Session web pages for further info

Session Organizers:

Edgar Martínez-Moro
Institute of Mathematics Universidad de Valladolid, Spain
http://www.singacom.uva.es/~edgar
edgar@maf.uva.es

Ilias Kotsireas
Wilfrid Laurier University,
Department of Physics and Computer Science, Waterloo, Ontario, Canada
http://www.wlu.ca/science/physcomp/kotsireas/
ikotsire@wlu.ca

Steve Szabo
Eastern Kentucky University,
Department of Mathematics and Statistics, Richmond, KY, USA
Steve.Szabo@eku.edu

http://www.singacom.uva.es/~edgar/cactc2014/ (will be available soon)