Preface of special issue on coding theory and applications

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It is our pleasure to present this volume containing a collection of papers on coding theory and applications of coding theory. The eight papers in the collection are partly based on presentations given at the 5th International Castle Meeting on coding theory and applications at Vihula Manor, Estonia, in 2017. However, compared to the Castle Meeting presentations, the current papers have been substantially extended to include new results and more details. The papers have been subjected to a separate reviewing process for this volume.

The topics considered in the collection range over several problems of current interest, including studies of decoder structures for iterative decoders of graph-based codes (Beemer *et.al.*), bounds on the size of codes with different properties (Laaksonen and Östergård, Bartoli *et.al.*), state-space representations of convolutional codes (Napp *et.al.*), codes to protect hardware implementations against adversaries (Rabii and Keren), constant-dimension codes (Climent *et.al.*), and codes based on algebraic geometry (Johnsen and Verdure, Geil and Özbudak).

We want to thank all the authors who contributed to this volume for their efforts, and all the anonymous reviewers whose generous work has helped to improve the papers through several rounds of revisions.

Last but not least we want to thank the Cryptography and Communications — Discrete Structures, Boolean Functions and Sequences (CCDS) journal and its editor-in-chief Claude Carlet, for the opportunity to publish the collection of papers in this special volume.

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