References I

| [Ban+15] | Subhadeep Banik, Andrey Bogdanov, Takanori Isobe, Kyoji Shibutani, Harunaga Hiwatari, Toru Akishita, and Francesco Regazzoni. "Midori: A Block Cipher for Low Energy". In: Advances in Cryptology – ASIACRYPT 2015. 2015, pp. 411–436. |
|----------|--|
| [Ban+17] | Subhadeep Banik, Sumit Kumar Pandey, Thomas Peyrin, Yu Sasaki, Siang Meng Sim, and Yosuke Todo. "GIFT: A Small Present". In: Cryptographic Hardware and Embedded Systems – CHES 2017. 2017, pp. 321–345. |
| [BBS99] | Eli Biham, Alex Biryukov, and Adi Shamir. "Cryptanalysis of Skipjack Reduced to 31 Rounds Using Impossible Differentials". In: Advances in Cryptology – EUROCRYPT 1999. 1999, pp. 12–23. |
| [BC20] | Christina Boura and Daniel Coggia. "Efficient MILP Modelings for Sboxes and Linear Layers of SPN ciphers". In: IACR Transactions on Symmetric Cryptology (2020), pp. 327–361. |
| [Bei+16] | Christof Beierle, Jérémy Jean, Stefan Kölbl, Gregor Leander, Amir Moradi, Thomas Peyrin, Yu Sasaki, Pascal Sasdrich, and Siang Meng Sim. "The SKINNY Family of Block Ciphers and Its Low-Latency Variant MANTIS". In: Advances in Cryptology – CRYPTO 2016, pp. 123–153. |
| [Ber+16] | Thierry P. Berger, Julien Francq, Marine Minier, and Gaël Thomas. "Extended Generalized Feistel Networks Using Matrix Representation to Propose a New Lightweight Block Cipher: Lilliput". In: <i>IEEE Transactions on Computers</i> 65.7 (2016), pp. 2074–2089. |
| [BJ72] | Egon Balas and Robert Jeroslow. "Canonical Cuts on the Unit Hypercube". In: SIAM Journal on Applied Mathematics 23.1 (1972), pp. 61–69. |
| [BS91] | Eli Biham and Adi Shamir. "Differential Cryptanalysis of DES-like Cryptosystems". In: Journal of Cryptology 4.1 (1991), pp. 3–72. |
| [GNL12] | Zheng Gong, Svetla Nikova, and Yee Wei Law. "KLEIN: A New Family of Lightweight Block Ciphers". In: <i>RFID. Security and Privacy</i> . 2012, pp. 1–18. |

[Gur23] Gurobi Optimization, LLC. Gurobi Optimizer Reference Manual (Version 10.0.1). Available: https://www.gurobi.com. 2023.

References II

| [IS21] | Murat Burhan Ilter and Ali Aydin Selçuk. "A New MILP Model for Matrix Multiplications with Applications to KLEIN and PRINCE". In: Proceedings of the 18th International Conference on Security and Cryptography, SECRYPT 2021, 2021, pp. 420–427. |
|----------|--|
| [Ker83] | Auguste Kerckhoffs. "La Cryptographie Militaire". In: Journal des Sciences Militaires 9 (1883), pp. 5-83. |
| [Kim+03] | Jongsung Kim, Seokhie Hong, Jaechul Sung, Sangjin Lee, Jongin Lim, and Soohak Sung. "Impossible Differential Cryptanalysis for Block Cipher Structures". In: Progress in Cryptology – INDOCRYPT 2003. 2003, pp. 82–96. |
| [KL07] | Jonathan Katz and Yehuda Lindell. Introduction to Modern Cryptography. Chapman and Hall/CRC, 2007. |
| [Luo+09] | Yiyuan Luo, Zhongming Wu, Xuejia Lai, and Guang Gong. A Unified Method for Finding Impossible Differentials of Block Cipher Structures. Cryptology ePrint Archive, Paper 2009/627. 2009. |
| [Mou+12] | Nicky Mouha, Qingju Wang, Dawu Gu, and Bart Preneel. "Differential and Linear Cryptanalysis Using Mixed-Integer Linear Programming". In: Information Security and Cryptology. 2012, pp. 57–76. |
| [ST17a] | Yu Sasaki and Yosuke Todo. "New Algorithm for Modeling S-box in MILP Based Differential and Division Trail Search". In: Innovative Security Solutions for Information Technology and Communications. 2017, pp. 150–165. |
| [ST17b] | Yu Sasaki and Yosuke Todo. "New Impossible Differential Search Tool from Design and Cryptanalysis Aspects". In: Advances in Cryptology – EUROCRYPT 2017. 2017, pp. 185–215. |
| [ST18] | Yu Sasaki and Yosuke Todo. "Tight Bounds of Differentially and Linearly Active S-Boxes and Division Property of Lilliput". In: <i>IEEE Transactions on Computers</i> 67.5 (2018), pp. 717–732. |
| | |

References III

- [Sun+14a] Siwei Sun, Lei Hu, Meiqin Wang, Pengpian Wang, Kexin Qiao, Xiaoshuang Ma, Danping Shi, and Ling Song. "Towards Finding the Best Characteristics of Some Bit-oriented Block Ciphers and Automatic Enumeration of (Related-key) Differential and Linear Characteristics with Predefined Properties". In: *IACR Cryptology ePrint Archive* 2014 (2014), pp. 747–777.
- [Sun+14b] Siwei Sun, Lei Hu, Peng Wang, Kexin Qiao, Xiaoshuang Ma, and Ling Song. "Automatic Security Evaluation and (Related-key) Differential Characteristic Search: Application to SIMON, PRESENT, LBlock, DES(L) and Other Bit-Oriented Block Ciphers". In: Advances in Cryptology – ASIACRYPT 2014. 2014, pp. 158–178.
- [The20] The Sage Developers. Sage Math, the Sage Mathematics Software System (Version 9.0). Available: https://www.sagemath.org. 2020.
- [Udo21] Aleksei Udovenko. "MILP Modeling of Boolean Functions by Minimum Number of Inequalities". In: IACR Cryptology ePrint Archive 2021 (2021), p. 1099.
- [WW12] Shengbao Wu and Mingsheng Wang. "Automatic Search of Truncated Impossible Differentials for Word-Oriented Block Ciphers". In: Progress in Cryptology – INDOCRYPT 2012. 2012, pp. 283–302.
- [Yin+18] Jun Yin, Chuyan Ma, Lijun Lyu, Jian Song, Guang Zeng, Chuangui Ma, and Fushan Wei. "Improved Cryptanalysis of an ISO Standard Lightweight Block Cipher with Refined MILP Modelling". In: Information Security and Cryptology. 2018, pp. 404–426.