Applying Convolutional Codes to Key Extraction Using Ring Oscillator PUFs

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Recently, convolutional codes were applied to error correction in Physical Unclonable Functions (PUFs). In previous work, we used a mathematical model from the literature in order to obtain reliability values for the several bits extracted from an SRAM PUF. In this work we use real world data which are available for a collection of Ring Oscillator PUFs (ROPUFs), in order to verify that the codes suggested based on the mathematical model are also practicable.