

5th Cryptography Treasure Hunt an introduction to number theory based cryptography

Numbers 4 Safety

5 August 2024, Margit-szigeti, Budapest, Hungary



During its European tour this summer, Numbers 4 Safety stopped in Hungary to hold its flagship event, the *Cryptography Treasure Hunt - an introduction to number theory based cryptography*, in Budapest, in a collaboration with the Hungarian Academy of Sciences.

The event took place on August 5, 2024, on the Danube's Margaret Island (Margit-sziget) in central Budapest. It was organized by Bogdan Jones and Darius Jones, with support from Professors Péter Juhász and Réka Szász (Budapest, Hungary).

The participants of the 5th edition of the *Cryptography Treasure Hunt* series were high school students and school teachers, with prior experience in mathematical cryptography. Sharing with them our approach to introducing foundational topics in number theory based cryptography and receiving their feedback was a wonderful pedagogical exchange. We were intrigued to learn from them that, in Hungarian, the Caesar cipher requires arithmetic modulo 44 (in contrast to 26 in English).

We look forward to returning to Hungary for future editions of the *Cryptography Treasure Hunt*!



Hard at work decrypting the affine cipher



*Some of the laureates of
the 5th Cryptography Treasure Hunt*