



Simion Stoilow Institute of Mathematics
of the Romanian Academy



National University of Science and
Technology Politehnica Bucharest

Workshop on
Formulas in Number Theory - Research in Pairs in Bucharest

Bucharest, February 14, 2024

IMAR, Amphitheater *Miron Nicolescu*

10:00 - 10:30 **Lorenzo Sauras-Altuzarra** (Technische Universität Wien)
Proof mining in Fermat numbers

10:30 - 11:00 **Mihai Prunescu** (University of Bucharest and IMAR)
*Closed term formulas for tau, sigma, phi and other
functions*

11:00 - 11:30 **Mihai Cipu** (IMAR)
*Explicit formulas for the solutions of simultaneous Pell
equations*

Coffee Break

12:30 - 13:00 **Silviu Bălănescu** (Politehnica Bucharest)
On the arithmetic quasi-depth

13:00 - 13:30 **Nicolae Bonciocat** (IMAR)
Resultants, prime numbers and irreducible polynomials

13:30 - 14:00 **Vlad Matei** (IMAR)
Some new families with prescribed Galois group

The meeting is organized by the Simion Stoilow Institute of Mathematics of the Romanian Academy and the National University of Science of Technology Politehnica Bucharest. Support from *Bitdefender* is kindly acknowledged.