Discrete Mathematics Seminar

Title: The additive index of self-mappings of finite fields

Speaker: Pierre Bienvenu (Johann Radon Institute for Computational and Applied Mathematics, Austria)

Date: Wed 4th November 2026 at 2:00PM

Location: N0.20 - Science North

Abstract: What makes a mapping $F_q -> F_q too simple, or complex enough? Several complexity measur$
$F_q have been studied in the literature. In 2022, Reis and Wang introduced another complexity measure, th$
$mapping of a finite field. It measures to which extent a mappiece-wise F_p-affine is-$
$an affine map has index 1, a random map index q. In this talk, we present this notion and compare it to the$
$Hellman and the discrete logarithm. Joint work with Arne Winterhof (Austrian Academy of Sciences)$