1176-11-209 Lukas Koelsch, 4202 E Fowler Ave, Tampa, FL 33620, and Giacomo Micheli^{*}, 4202 E Fowler Ave, Tampa, FL 33620. A Galois theoretical perspective on APN functions.

In this talk we will describe an approach to construct or prove non-existence of Almost Perfect Nonlinear functions. We will need tools from algebraic number theory over global function fields and Galois theory, which will be briefly introduced at the beginning of the talk. This is a joint project with Lukas Koelsch. (Received January 23, 2022)