ALPEN-ADRIA UNIVERSITÄT KLAGENFURT

INVITATION TO A TALK

The (non-)unique factorizations of powers of irreducible integer-valued polynomials

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Chaired by Clemens Heuberger | Department of Mathematics

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ABSTRACT

Non-unique factorization of elements into irreducibles has been observed in the ring of integer-valued polynomials and its generalizations. A particularity of non-unique factorization domains is that there is in general no saying how the powers of an irreducible element factor. From a factorization-theoretic point of view, one therefore wants to identify those elements among the irreducibles whose powers factor uniquely–a concept that lies between irreducibility and primality. We call such elements *absolutely irreducible*.

In this talk we discuss how to recognize absolutely irreducible integer-valued polynomials using a combination of algebraic and number-theoretic techniques.

We hope to see you there!