On a representation of polynomials for computing involutive and Gröbner bases

Denis A. Yanovich

Laboratory of Information Technologies Joint Institute for Nuclear Research yan@jinr.ru

Abstract

Anyone knows about polynomials representation as linked lists, heaps and geobuckets. In this talk strange but interesting representation of group of polynomials as a big table specialized for computation of involutive and Gröbner bases will be presented. Advantages and disadvantages of such approach, program memory footprint and speed of computations will be discussed.