Introduction to toric varieties

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Abstact

Algebraic geometry is one branch of math based on the study of polynomials. This branch has been interesting mathematicians since a long time. Since 16th century, big names such as Viète, Fermat or Descartes dived in the study of certain algebraic curves. Despite this historical seniority of algebraic geometry, the study of toric varieties only started recently (during the 70s and 80s), whereas they are the simplest algebraic varieties !

It is quite easy to associate discrete structures to toric varieties. We will observe the links between those structures and the properties of the associated varieties.