Boğaziçi
MATH COLLOQUIUM

A Conjecture on Rational Polyhedra

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Abstract:

This seminar will discuss an approach to solve a conjecture formulated by Brlek and Reutenauer in 2003 on the algebra spanned by the indicator functions of rational polyhedra.

A construction due to Khovanskii and Pukhlikov (1992) and independently to Lawrence (1991) provides a valuation between that algebra and the algebra of rational functions. Brlek and Reutenauer conjectured that this valuation can be obtained by associating with the indicator function of a rational polyhedron P, the rational function obtained by interpreting in a canonical way a non ambiguous rational expression describing the set of integer points lying in P.

Date : Wednesday, October 19, 2022
Time: 13:30
Place: TB 130, Boğaziçi University