Khovanskii bases in computer algebra

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In this talk we will recall the definition of Khovanskii bases, also known as Sagbi bases, and make a parallel with properties of Gröbner bases. Inspired by several applications of Gröbner bases in solving 0-dimensional polynominal systems, we will provide analogous applications in computer algebra using Khovanskii bases. These include the introduction of an eigenvalue algorithm based on the assumption that the equations are homogeneous with respect to a finite Khovanskii basis and homotopy continuation methods that exploit toric degenerations.