# NUMERICAL METHODS FOR SOLVING POLYNOMIAL SYSTEMS

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Abstract. There are two fundamentally different approaches to solving polynomial systems: exact, symbolic, algebraic methods and inexact, numerical, geometric methods. Both approaches come with benefits and limitations. In this talk, I will describe some of the fundamental constructions and techniques of the latter approach. The aim is to provide enough of an introduction that the participants are comfortable trying numerical algebraic geometry software if they are ever confronted with a polynomial system that they need to solve.