

This workshop focuses on interactions between real algebraic geometry, operator theory, optimization, and algorithms for systems control, with a particular emphasis on infinite-dimensional moment problems. It is an outgrowth of a previous successful MFO workshop held in 2014, itself a continuation of a long series of MFO workshops on real algebraic geometry which started in 1984. The mathematical topics of interest include sum-of-squares representations of non-negative polynomials (in commutative and non-commutative algebras) and the dual problem of moments, especially for measures supported on infinite-dimensional functional spaces, and their applications in polynomial optimization and systems control.