

THE UNIVERSITY



OF HONG KONG

*Institute of Mathematical Research
Department of Mathematics*

GEOMETRY SEMINAR

Proofs of Pólya's Positivstellensatz

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Abstract

Pólya's Positivstellensatz states that if a n -ary real form f is strictly positive on the standard $(n - 1)$ -simplex, then $(x_1 + \dots + x_n)^m f$ strictly has positive coefficients for some natural number m . We review various families of proofs of Pólya's Positivstellensatz and explicate the different additional information that each of these families yields regarding positivity over the standard simplex.

Date: May 2, 2018 (Wednesday)

Time: 4:30 - 5:30pm

Venue: Room 210, Run Run Shaw Bldg., HKU

All are welcome