

**Summer school EUR MINT
2022 Moments & Positive
Polynomials & their
Applications**

Report of Contributions

Contribution ID: 1

Type: **not specified**

Basics of Conic Optimization (J.-B. Lasserre) SOS and semidefinite programming (J.-B. Lasserre)

Monday, June 27, 2022 9:30 AM (1 hour)

Contribution ID: 2

Type: **not specified**

Positivity certificates and K-moment problem (J.-B. Lasserre)

Monday, June 27, 2022 11:00 AM (1 hour)

Contribution ID: 3

Type: **not specified**

LP- and SOS-based hierarchy for optimization (J.-B. Lasserre)

Monday, June 27, 2022 2:00 PM (1 hour)

Contribution ID: 4

Type: **not specified**

Comparing LP and SOS-based hierarchies – Finite convergence & Global Optimality conditions (J.-B. Lasserre

Monday, June 27, 2022 3:30 PM (1 hour)

Contribution ID: 5

Type: **not specified**

Some applications of the Moment Problem (J.-B. Lasserre)

Tuesday, June 28, 2022 9:30 AM (1 hour)

Contribution ID: 6

Type: **not specified**

Exploiting correlative sparsity (Victor Magron)

Tuesday, June 28, 2022 11:00 AM (1 hour)

Contribution ID: 7

Type: **not specified**

Exploiting term sparsity (Victor Magron)

Tuesday, June 28, 2022 2:00 PM (1 hour)

Contribution ID: 8

Type: **not specified**

Certified optimization: from approximate to exact bounds (Victor Magron)

Tuesday, June 28, 2022 3:30 PM (1 hour)

Contribution ID: 9

Type: **not specified**

Noncommutative optimization & quantum information (Victor Magron)

Wednesday, June 29, 2022 9:30 AM (1 hour)

Contribution ID: **10**

Type: **not specified**

Exercise session (Victor Magron)

Wednesday, June 29, 2022 11:00 AM (1 hour)

Contribution ID: 11

Type: **not specified**

Occupation measures for dynamical systems & control (Milan Korda)

Wednesday, June 29, 2022 2:00 PM (1 hour)

Contribution ID: 12

Type: **not specified**

Trajectory recovery (atomic approximation, Christoffel-Darboux Kernel

Wednesday, June 29, 2022 3:30 PM (1 hour)

Contribution ID: 13

Type: **not specified**

The region of attraction, invariant sets and extreme values (Milan Korda)

Thursday, June 30, 2022 9:30 AM (1 hour)

Contribution ID: 14

Type: **not specified**

**Extensions: Partial differential equations,
complexity reduction (sparsity, state-space partition)
(Milan Korda)**

Thursday, June 30, 2022 11:00 AM (1 hour)

Contribution ID: 15

Type: **not specified**

Exercises (Milan Korda)

Thursday, June 30, 2022 2:00 PM (1 hour)