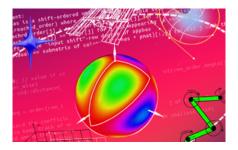
## Geometry of Polynomial System Solving, Optimization and Topology



ID de Contribution: 37 Type: Non spécifié

## Cloth State Representation Using a Derivative of the Gauss Linking Integral by Maria Alberich-Carraminana. 15:00-16:00

mardi 24 octobre 2023 15:00 (1 heure)

Robotic manipulation of cloth presents a complex challenge due to the infinite-dimensional shape-state space of textiles. This complexity makes accurate state estimation a daunting task. To address this issue, we introduce the concept of dGLI Cloth Coordinates—a finite, low-dimensional representation of cloth states. This novel approach enables us to effectively distinguish among a wide range of folded states, paving the way for efficient learning methods in cloth manipulation planning and control.