

**POEMA**

<i>Meeting Type</i>	<b><i>Online Learning Weeks</i></b>
<i>Date</i>	<b><i>10 June 2020</i></b>
<i>Time</i>	<b><i>16:00 – 17:30 CEST</i></b>
<i>Talk</i>	<b><i>Polynomial optimal control</i></b>
<i>Lecturer</i>	<b><i>Didier Henrion – LAAS-CNRS</i></b>
<i>No of attendants</i>	<b><i>70</i></b>

**1. Questions during the course**

- What are the convexity assumptions for having no duality gap?
- Are the  $\inf = \min$  reached here ? why ? are they conditions ?
- Is it possible to generalize the framework, that you just explained for general POCPs, to fractional OCPs which includes fractional differential equations?
- It is possible to extract an approximate optimal control law from the solution of the moment-SOS problems? If so, could you please give an idea of the strategy?
- Could you please explain more about what you mean by "transporting the Lebesgue measure" on  $[-1,1]$  to obtain  $v^*$ ?