**Seminário**

**(Grupo Equações Diferenciais Não-Lineares)**

**Carleman inequalities for theoretical**

**and numerical control**

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Resumo:

The goal of this talk is to describe the role of Carleman inequalities for the theoretical and numerical solution of control problems for PDEs. First, I will recall the framework of approximate, exact and null controllability and the related (equivalent) uniqueness and observability properties. Then, I will show how global Carleman inequalities appear in this context and lead in many (relatively simple) cases to the desired results. I will also indicate which can be the role of these inequalities from a numerical viewpoint. This will be illustrated with the results of some experiments. Finally, several open problems, related to the control of other more complex systems, will be mentioned.

**19 de setembro de 2018 (quarta-feira) às 11:00h horas**

**Sala 208 - Departamento de Matemática - CCEN**