## V - WENLU - Workshop em Equações Diferenciais não Lineares da UFPB - Verão 2016

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**Title:** Hierarchic control for exact controllability of parabolic equations with distributed and boundary controls.

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**Abstract:** We present some results of exact controllability for parabolic equations in the context of hierarchic control through Stackelberg-Nash strategy. We analyse two cases, in the first the main control (the leader) act in interior of domain and the secondary controls (the followers) in the small parts of boundary, in the second case we consider the leader in the boundary and the followers in the interior. In both cases, for each choose of leader, a corresponding Nash equilibrium pair is found, then, we obtain a leader with which solved the problem of exact controllability to a prescribed (but arbitrary) trajectory. We study linear and semilinear problems.