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Optimal control problems related to chemo-repulsion systems

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Resumen

In this talk we present bilinear optimal control problems related to chemo-repulsion systems with linear and superlinear production terms in the 2D case and linear in the 3D case. We establish results on existence of global optimal solutions and derive the respective optimality systems, based on a result of the existence of Lagrange multipliers in Banach spaces. Finally, we analyze the main differences (and difficulties) between the 2D and 3D cases.

Keywords: chemo-repulsion model, strong solutions, bilinear optimal control

Referencias

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