

Optimal control of free boundary models for tumor growth

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In this talk, we will investigate the optimal control of treatment in free boundary PDE models for tumor growth. The optimal control strategy is designed to inhibit tumor growth while minimizing side effects. In order to characterize it, the optimality system is derived, and a necessary condition is obtained. Numerical simulations will be presented to illustrate the theoretical findings and assess the impact of the optimal control strategy on tumor growth dynamics.

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