Workshop on PDEs for Biology systems, Sevilla Resumen Póster

<u>Title</u>: "Solving a glioblastoma brain tumor-inmune evasion model by multistage Adomian decomposition improved method"

<u>Abstract</u>: In this work we present multistage Adomian decomposition method (MADM) applied to solve a model representing a cerebral tumor-immune evasion process. The system is ruling by a set of differential equations describing the dynamical behavior the inmune cells in the presence of a tumor growing. We present a numerical comparison between the MADM and a conventional method such as the fourth-order Runge-Kutta (RK4) method for solving systems of ordinary differential equations. The numerical results demonstrate that the new method is quite accurate and readily implemented.

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