Global existence and asymptotic behaviour of solutions for a hyperbolic-parabolic model of chemotaxis on network

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Abstract

In this paper, we discuss a hyperbolic-parabolic system modeling biological phenomena evolving on a network. The global existence of the is obtained by using energy estimates with suitable the transmission conditions at interior. Moreover, for the case of acyclic network, the existence and uniqueness of stationary solution to the system is proposed and it is proved that these ones are asymptotic profiles for a class of global solutions

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