Existence and uniqueness of maximal strong solution of a 1D Blood flow in a network of vessels

6th, October

Abstract: In this talk, we shall review some models used to describe blood flows in the human brain. We shall give new existence, uniqueness and stability results for some of those models, corresponding to systems of one-dimensional partial differential equations. We shall also prove a stability estimate under suitable nonlinear Dirichlet boundary conditions.

Joint work with D. Maity and A. Roy.