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On the dynamics of gaseous detonation in porous inert media ROMAN SEMENKO, ASLAN KASIMOV, King Abdullah University of Science and Technology, BORIS ERMOLAEV, Semenov Institute of Chemical Physics — We consider a one-dimensional detonation wave propagating through a mixture of detonable gas in a porous inert medium. We assume the presence of solid metal spheres in a tube which incur the losses of the momentum and heat. The main goal of this work is to understand the role played by the losses in the structure of the steady state solutions and to analyze their linear stability.

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