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Traveling waves in a combustion model.

We study the stability of fronts in a reduction of a model of combustion in hydraulically resistant porous media. We first consider the model with the Lewis number chosen in a specific way and with initial conditions of a specific form. We then show that the stability results for that system extend to the fronts in the full system with the same Lewis number. The fronts are either absolutely unstable or convectively unstable. (Received January 12, 2017)