

Numerical Methods for Hyperbolic PDEs

Homework 10

James King*, Robert Ziegler†

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Exercise 1

(a)

We implement the scheme we devised in HW9, Exercise 2.

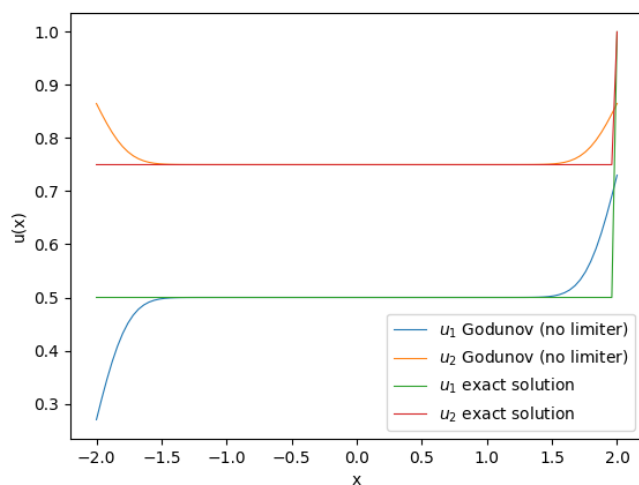


Figure 1: Numerical solutions with the Godunov scheme without limiter, together with exact solution

*Immatriculation Nr. 23-942-030

†Immatriculation Nr. 18-550-558

(b)

We implement the limiters in the reconstruction step.

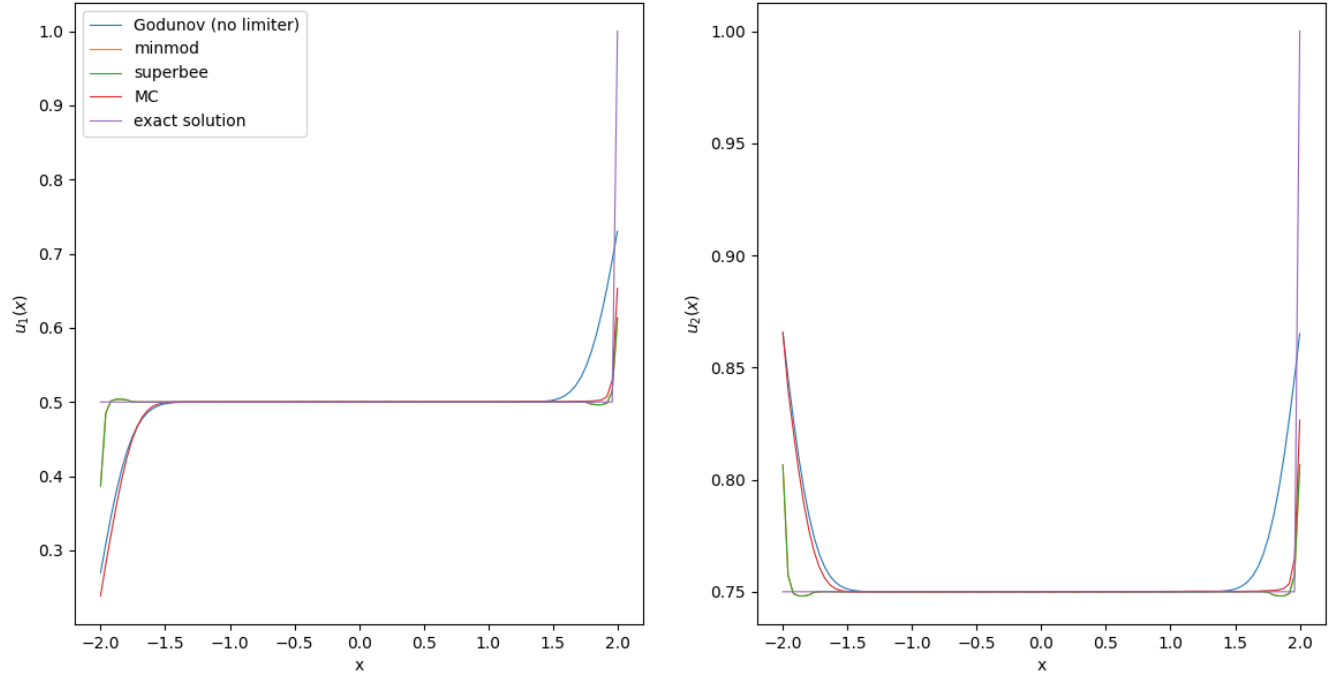


Figure 2: Numerical solutions with the Godunov scheme with and without limiters, together with exact solution