

**A UNIVERSAL SOLUTION FOR A QUASI-LINEAR
PARABOLIC EQUATION OCCURING IN AERODYNAMICS**

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ABSTRACT. We shall present results on universal functions as well as universal (formal) series for solutions to a quasi-linear parabolic equation arising in aerodynamics, Burgers' equation. Burgers' equation is one of the simplest examples of a non-linear partial differential equation and also perhaps the simplest equation describing waves under the influence of diffusion. The crucial role in our investigation is due to the so-called Cole-Hopf transformation.

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