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# Solvability of some degenerate parabolic equations with convective terms

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## Abstract

In this talk, we consider some strong degenerate parabolic equations and systems. The equations which are called strongly degenerate parabolic equations are regarded as a linear combination of the conservation laws and the porous medium type equations. Thus, these equations have both properties of hyperbolic equations and those of parabolic equation. Moreover, they describe various nonlinear convective diffusion phenomena such as filtration problems, Stefan problems and so on. In this talk, we consider strongly degenerate parabolic equations and systems. Our purpose is to prove the existence and uniqueness of entropy solutions to the problem.

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