### Title
On the Structure of Multiple Stable Equilibria in Nonlinear Diffusion Systems

### Author(s)
FUJII, Hiroshi

### Citation
数理解析研究所講究録 数理解析研究所講究録

### Issue Date
1985-01

### URL
http://hdl.handle.net/2433/98818

### Type
Departmental Bulletin Paper

### Textversion
publisher

Kyoto University
On the Structure of Multiple Stable Equilibria in Nonlinear Diffusion Systems

Hiroshi FUJII

Kyoto Sangyo University, Kyoto 603, Japan

(Abstract)

This presentation focuses on the mathematical structure of the phenomenon of multiple coexistence of stable, stationary solutions, which may appear in a class of nonlinear diffusion systems. See, [1]-[4]. (An outline of) a proof of the coexistence phenomenon for the $D_2^r$-sheets of solutions is presented. This proposition has been introduced as a working hypothesis ("the global conjecture") in the paper presented at the U.S.-Japan Seminar on Nonlinear Partial Differential Equations in Applied Science, 1982 [2]. The complete proof of the proposition will appear in [1].

References


