
Vorlesung
Nichtlineare partielle Differentialgleichungen
Wintersemester 11/12

Literatur

Monotone Operatoren: [Ruz04, Zei86a]

Funktionalanalysis, allgemeines: z.B. [Alt02, Wer00]

ein nützliches Sammelwerk (nichtlineare Funktionalanalysis und Variationsrechnung):

[Zei86b, Zei86c, Zei86a]

Partielle Differentialgleichungen: [Ada92, GT77, Eva98]

Literatur

[Ada92] R. A. Adams. *Sobolev Spaces*, volume 65 of *Pure and Applied Mathematics*. Academic Press, Inc., Boston, 1992.

[Alt02] H. W. Alt. *Lineare Funktionalanalysis*. Springer-Verlag, Berlin, Heidelberg, 4 edition, 2002.

[Eva98] L. C. Evans. *Partial Differential Equations*. American Mathematical Society, 1998.

[GT77] D. Gilbarg and N. S. Trudinger. *Elliptic partial differential equations of second order*, volume 224 of *Grundlehren der mathematischen Wissenschaften*. Springer-Verlag, Berlin, 1977.

[Ruz04] M. Ruzicka. *Nichtlineare Funktionalanalysis. Eine Einführung*. Springer, 2004.

[Wer00] D. Werner. *Funktionalanalysis*. Springer Verlag, Berlin, Heidelberg, New York, 3 edition, 2000.

[Zei86a] E. Zeidler. *Nonlinear Functional Analysis and its Applications*, volume 2/B Nonlinear Monotone Operators. Springer Verlag Inc., New York, 1986.

[Zei86b] E. Zeidler. *Nonlinear Functional Analysis and its Applications*, volume 1 Fixed-Point Theorems. Springer Verlag Inc., New York, 1986.

[Zei86c] E. Zeidler. *Nonlinear Functional Analysis and its Applications*, volume 2/A Linear Monotone Operators. Springer Verlag Inc., New York, 1986.