Seminar "Analysis"

Wintersemester 2015/16

Prof. Dr. Ben Schweizer

14. September 2015

Ort und Zeit: Donnerstag, 14-16 in Raum M611

Themen

Vortragende in Klammern

1. Die "moving plane"-Methode [HL11], Kap. 2.6, [Eva10] Kap. 9.5 (ÖY)
2. Konstruktion optimaler Abschirmungen [BKR15] (RS)
3. DeGiorgi-Moser gleichmäßige Beschränktheit von Lösungen [HL11], Kap. 4.2 (FS)
4. Nichttriviale Lösungen bei kritischem Exponenten [BN83, CW05] (TS)
5. Minimierer eines Funktionals auf $\mathbb{R}^n$ [BL84] (KS)
6. Beschränktheit von Lösungen bei Kreuz-Diffusion [HW05] (TV)
7. Blow-up bei Kreuz-Diffusion [HV96a, HV96b, HW01, HW05, Win13] (SL)
8. Formulierung von Streuproblemen: Maxwell und Helmholtz [CK13], Kap. 1.1–2.2 (GR)
9. Gamma-Konvergenz I [Bra02] (JG)
10. Gamma-Konvergenz II [Bra02] (ME)
11. Zwei-Skalen Konvergenz [All92] (KB)
12. Das div-curl Lemma [JKO94, Mur78, CDM11, KY09] (FL)

Literatur

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[BKR15] Marco Bonacini, Hans Knüpfer, and Matthias Röger. Optimal distribution of oppositely charged phases: perfect screening and other properties. 2015.

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[Bra02] Andrea Braides. Γ-*convergence for beginners*, volume 22 of *Oxford Lecture Series in Mathematics and its Applications*. Oxford University Press, Oxford, 2002.

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[JKO94] V. V. Jikov, S. M. Kozlov, and O. A. Oleĭnik. *Homogenization of differential operators and integral functionals*. Springer-Verlag, Berlin, 1994. Translated from the Russian by G. A. Yosifian [G. A. Iosif′yan].

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