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Summer term 2012

Graduate Seminar Advanced Topology S4D2 “Selected papers in homotopy theory”

Tuesday 14-16, room N 0.003

The idea of this seminar is that each participant will give one or two talks about a “classic” paper in homotopy theory or a related topic. By definition, “classic” refers to papers which have become influential because they solved important problems or laid the foundations for work of many other people. We included a list of suggestions for such papers. The pdf-file of this document can be found at <http://www.math.uni-bonn.de/people/sagave/> and contains links to the original publications (via the DOI) and reviews if available¹.

Schedule

- Talk 1, 03.04.2012:** – Christian Wimmer:
Clifford modules [ABS64], Part I
- Talk 2, 10.04.2012:** – Christian Wimmer:
Clifford modules [ABS64], Part II
- Talk 3, 24.04.2012:** – Dominik Ostermayr:
K-theory and reality [Ati66], Part I
- Talk 4, 08.05.2012:** – Dominik Ostermayr:
K-theory and reality [Ati66], Part II
- Talk 5, 15.05.2012:** – Alexander Körschgen:
Semisimplicial spectra [Kan63], Part I
- Talk 6, 22.05.2012:** – Alexander Körschgen:
Semisimplicial spectra [Kan63], Part II
- Talk 7, 05.06.2012:** – Daniel Brüggemann:
Smash products and Γ -spaces [Lyd99], Part I
- Talk 8, 12.06.2012:** – Daniel Brüggemann:
Smash products and Γ -spaces [Lyd99], Part II
- Talk 9, 19.06.2012:** – Daniel Frerichs:
Homotopy colimits in the category of small categories [Tho79], Part I
- Talk 10, 03.07.2012:** – Daniel Frerichs:
Homotopy colimits in the category of small categories [Tho79], Part II

References

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¹In most cases, the content is only accessible from computers within the university network.

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- [Bök85] Marcel Bökstedt, *The topological Hochschild homology of \mathbb{Z} and \mathbb{F}_p* , 1985 and later. Unpublished manuscript, Bielefeld.
- [DT58] Albrecht Dold and René Thom, *Quasifaserungen und unendliche symmetrische Produkte*, *Ann. of Math. (2)* **67** (1958), 239–281. DOI:10.2307/1970005. MR0097062 (20 #3542)
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- [Goo86] Thomas G. Goodwillie, *Relative algebraic K-theory and cyclic homology*, *Ann. of Math. (2)* **124** (1986), no. 2, 347–402. DOI:10.2307/1971283. MR855300 (88b:18008)
- [Kan63] Daniel M. Kan, *Semisimplicial spectra*, *Illinois J. Math.* **7** (1963), 463–478. MR0153017 (27 #2986)
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- [MS75] D. McDuff and G. Segal, *Homology fibrations and the “group-completion” theorem*, *Invent. Math.* **31** (1975/76), no. 3, 279–284. DOI:10.1007/BF01403148. MR0402733 (53 #6547)
- [Qui72] Daniel Quillen, *On the cohomology and K-theory of the general linear groups over a finite field*, *Ann. of Math. (2)* **96** (1972), 552–586. DOI:10.2307/1970825. MR0315016 (47 #3565)
- [Tho79] R. W. Thomason, *Homotopy colimits in the category of small categories*, *Math. Proc. Cambridge Philos. Soc.* **85** (1979), no. 1, 91–109. DOI:10.1017/S0305004100055535. MR510404 (80b:18015)