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## BIBLIOGRAPHIE

- [B-G] BARGE, J. and E. GHYS. Surfaces et cohomologie bornée. *Invent. Math.* 92 (1988), 509-526.
- [Be] BESSON, G. *Sém. de Cohomologie bornée*. ENS Lyon (Fév. 1988).
- [Brk] BROOKS, R. Some remarks on bounded cohomology. In *Riemannian Surfaces and related topics*. Ann. of Math. Stud. 91 (1981), 53-65.
- [Brw] BROWN, K. S. *Cohomology of Groups*, G.M.T. 87, Springer-Verlag, Berlin-Heidelberg-New York (1982).
- [Cu] CULLER, M. Using surfaces to solve equations in free groups. *Topology* 20 (1981), 133-145.
- [D-V] DENNIS, R. K. and L. N. VASERSTEIN. On a question of M. Newman on the number of commutators. *J. of Algebra* 118 (1988), 150-161.
- [Ed] EDMUND, C. C. On the endomorphism problem for free groups. *Comm. in Algebra* 3 (1975), 1-20.
- [E-H-N] EISENBUD, D., U. HIRSCH and W. NEUMANN. Transverse foliations of Seifert bundles and self homeomorphism of the circle. *Comment. Math. Helv.* 56 (1981), 639-660.
- [G-T] GOLDSTEIN, R. Z. and E. C. TURNER. Applications of topological graph theory to group theory. *Math. Z.* 165 (1979), 1-10.
- [Gr 1] GROMOV, M. Hyperbolic manifolds, groups and actions. *Ann. Math. Studies* 97, Princeton (1981), 183-213.
- [Gr 2] —— Volume and bounded cohomology. *Pub. Math. IHES* 56 (1982), 5-99.
- [H-S] HEIMES, R. and R. STÖCKER. Covering of surfaces. *Arch. Math.* 30 (1978), 181-187.
- [Iv] IVANOV, N. V. Foundations of the theory of bounded cohomology. *J. of Soviet Math.* 37 (1987), 1090-1115.
- [Jo] JOHNSON, B. E. Cohomology in Banach Algebras. *Memoirs A.M.S.* 127 (1972), 1-96.
- [L-N] LYNDON, R. C. and M. NEWMAN. Commutators as products of squares. *Proc. Am. Math. Soc.* 39 (1973), 267-272.
- [L-S] LYNDON, R. C. and P. E. SCHUPP. *Combinatorial Group Theory*. Springer-Verlag, Berlin-Heidelberg-New York (1977).
- [Ma 1] MASSEY, W. S. *Algebraic Topology: An Introduction*. Hartcourt, Brace and World, New York (1967).
- [Ma 2] —— Finite covering spaces of 2-manifolds with boundary. *Duke Math. J.* 41 (1967), 875-887.
- [M-M] MATSUMOTO, S. and S. MORITA. Bounded cohomology of certain groups of homeomorphisms. *Proc. Am. Math. Soc.* 94 (1985), 539-544.
- [Mil 1] MILNOR, J. On the existence of a connection with curvature zero. *Comment. Math. Helv.* 32 (1958), 215-223.
- [Mil 2] —— *Introduction to algebraic K-theory*. Princeton University Press, Princeton, New-Jersey (1971).
- [Min] MINAKAWA, H. Examples of exceptional homomorphisms which have non-trivial Euler numbers. *Preprint*.
- [Mit] MITSUMATSU, Y. Bounded cohomology and  $L^1$ -homology of surfaces. *Topology* 23 (1984), 465-471.
- [Ne] NEWMAN, M. Unimodular commutators. *Proc. AMS 101* (1987), N° 4, 605-609.

- [P-S] PÓLYA, G. and G. SZEGÖ. *Problems and theorems in Analysis. Vol. I.* Springer-Verlag, Berlin-Heidelberg-New York (1972).
- [Wi] WICKS, M. J. Commutators in free products. *J. London Math. Soc.* 37 (1962), 433-444.
- [Wo] WOOD, J. Bundles with totally disconnected structure group. *Comment. Math. Helv.* 46 (1971), 257-273.

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