References

1. J. W. Alexander, *Topological invariants of knots and links*, Trans. Amer. Math. Soc. **30** (1928), 275–306.

2. ———, *Note on Riemann spaces*, Bull. Amer. Math. Soc. **26** (1920), 370–372.

3. R. H. Fox, *Free differential calculus*. II, Ann. of Math. (2) **59** (1954), 196–210. MR **15**, 931.

4. H. M. Hilden, *Every closed orientable 3-manifold is a 3-fold branched covering space of* S^3, Bull. Amer. Math. Soc. **80** (1974), 1243–1244. MR **50** #3211.

5. M. A. Kervaire, *Les noeuds de dimensions supérieures*, Bull. Soc. Math. France **93** (1965), 225–271. MR **32** #6479.

6. B. Mazur, *On embeddings of spheres*, Bull. Amer. Math. Soc. **65** (1959), 59–65. MR **22** #8469.

7. ———, *On embeddings of spheres*, Acta Math. **105** (1961), 1–17. MR **23** #A2870.

8. J. M. Montesinos, *Three manifolds as 3-fold branched covers of* S^3, Quart. J. Math. Oxford Ser. (2) **27** (1976), no. 105, 85–94. MR **52** #15431.

9. L. Neuwirth, *The algebraic determination of the genus of knots*, Amer. J. Math. **82** (1960), 791–798. MR **22** #11397.

10. C. D. Papakyriakopoulos, *On Dehn's lemma and the asphericity of knots*, Ann. of Math. (2) **66** (1957), 1–26. MR **19**, 761.

11. H. Seifert, *Über das Geschlecht von Knoten*, Math. Ann. **110** (1934), 571–592.

12. A. Shapiro and J. H. C. Whitehead, *A proof and extension of Dehn's lemma*, Bull. Amer. Math. Soc. **64** (1958), 174–178. MR **21** #2242.

13. J. R. Stallings, *On fibering certain 3-manifolds*, Topology of 3-manifolds and related topics (Proc. Univ. of Georgia Inst., 1961), Prentice-Hall, Englewood Cliffs, N. J., 1962, pp. 95–100. MR **28** #1600.

14. W. Haken, *Theorie der Normalflächen*, Acta Math. **105** (1961), 245–375. MR **25** #4519a.

LEE P. NEUWIRTH

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Ordinary differential equations in the complex domain, by Einar Hille, Pure and Applied Mathematics Series, John Wiley & Sons, New York, 1976, xi + 484 pp., $27.95.

The usual basic concepts and methods for ordinary differential equations in the complex domain are explained without going into tedious details. The reviewer believes that the readers will be able to familiarize themselves with those basics and that this book will be appreciated very much. It is fair to say that the interest of the author is more focussed on "Method" than "Intrinsic Meaning".

Through reading, the impression was that of listening to "Grandfather" while strolling with him in a quiet cemetary. He talks about good old days and beautiful people. In this book Lappo-Danilevskij is still alive, but Grothendieck does not exist. The introduction has two parts: Part I is "Algebraic and Geometric Structures" and Part II is "Analytical Structures". The contents of Part I actually belong to "Functional Analysis". They are not algebro-geometric in the sense of Grothendieck-Deligne-Katz (P. Deligne [3]). "Analytical Structures" means a collection of traditional basics for functions of one complex variable. The concept of analytic continuation is explained, but Riemann surfaces are not clearly defined. The resources look very meager. What can be accomplished? Indeed, not very much more than