to the subject and is, moreover, indispensible for a lot of important mathematics. It is true that one should figure out what abstract notions mean in a more concrete context, as in the case of the Baer sum. But one expects in a Springer Lecture Note that something more than that has happened after 66 pages. Another complaint concerns the title. It suggests that one will learn a lot about representation theory, not just the fact that Schur mulipliers occur when one tries to lift a projective representation to a linear one. It would have made more sense to put "isoclinism" in the title. If you want to learn about isoclinism and its connections with the multiplier, I suggest reading instead the survey article by one of the authors [2]. It has a swifter pace so that one can see more easily where things are going. In the same proceedings one may also read Wiegold's paper on the Schur multiplier. On page 204 of the book one should modify the definition of unicentral to save what follows. The correct requirement is that $\pi Z(G)$ equals $Z(Q)$ for all central extensions $\pi\colon G \to Q$.

References

1. R. Baer, *Erweiterungen von Gruppen und ihren Isomorphismen*, Math. Z. **38** (1934), 375–416.

2. F. R. Beyl, *Isoclinisms of group extensions and the Schur multiplicator*, Groups — St. Andrews 1981 (C. M. Campbell and E. F. Robertson, eds.), London Math. Soc. Lecture Note Ser., Vol. 71, Cambridge, 1982, pp. 169–185.

3. R. L. Griess, Jr., *Schur multipliers of the known finite simple groups*. II, The Santa Cruz Conference on Finite Groups, Proc. Sympos. Pure Math., vol. 37, Amer. Math. Soc., Providence, R.I., 1980, pp. 279–282.

4. H. Hopf, *Fundamentalgruppe und zweite Bettische Gruppe*, Comment. Math. Helv. **14** (1942), 257–309.

5. S. Mac Lane, *Origins of the cohomology of groups*, Topology and Algebra, L'Enseignement Math. Mono. 26 Kundig, Genève, 1978, pp. 191–219.

6. J. Milnor, *Introduction to algebraic K-theory*, Ann. of Math. Stud. No. 72, Princeton Univ. Press, Princeton, N.J., 1971.

7. I. Schur, *Über die Darstellung der endlichen Gruppen durch gebrochene lineare Substitutionen*, J. Reine Angew. Math. **127** (1904), 20–50.

8. ______, *Untersuchungen über die Darstellung der endlichen Gruppen durch gebrochene lineare Substitutionen*, J. Reine Angew. Math. **132** (1907), 85–137.

9. ______, *Über die Darstellungen der symmetrischen und alternierenden Gruppen durch gebrochene lineare Substitutionen*, J. Reine Angew. Math. **139** (1911), 155–250.

10. C. Soulé, *K_2 et le groupe de Brauer d'apres A. S. Merkurjev et A. A. Suslin*, Sem. Bourbaki, Vol. 1982/83, Exp. 601.

11. J. Wiegold, *The Schur multiplier: an elementary approach*, Groups — St. Andrews 1981, *op. cit.*, pp. 137–154.

WILBERD VAN DER KALLEN

BULLETIN (New Series) OF THE
AMERICAN MATHEMATICAL SOCIETY
Volume 10, Number 2, April 1984

0273-0979/84 $1.00 + $.25 per page

Introduction to number theory, by Loo Keng Hua, Springer-Verlag, Berlin, 1982, xviii + 572 pp., $46.00. ISBN 0-3871-0818-1

The book under review is a translation from the Chinese of a book first published in 1956. (The Chinese edition was reviewed by K. Mahler in *Mathematical Reviews*.) Some of the chapters in this translation have been