

quadric surfaces) are discussed in §§14, 15, and 16. The last article, §17, contains indications concerning the differential geometry in the large of convex curves and surfaces. The monograph closes with a rather complete bibliography. The reading of this remarkable monograph at places is not very easy, but is extremely suggestive and the total result is well worth the effort.

Being primarily interested in the theory of convex *bodies*, the authors did not enter into discussion of the theory of convex *functions* as such. The exposition of this theory, which plays such an important role in the modern development of analysis and theory of functions, would require an extended monograph of its own. Let us hope that such a monograph will appear soon in the *Ergebnisse* series, and that it will prove just as exciting as the monograph by Bonnesen and Fenchel.

J. D. TAMARKIN

*Lezioni sulla Teoria Geometrica delle Equazioni e delle Funzioni Algebriche.* By F. Enriques and O. Chisini. Volume 4, *Funzioni Ellittiche e Abelianae*. Zanichelli, Bologna, 1934. viii+274 pp.

This fourth volume concludes the series of magisterial lectures on algebraic geometry by Enriques with the collaboration of Chisini. They composed it during a vacation-sojourn in the country, and afterwards used it as the base of a course of lectures at the Universities of Rome and Milan, respectively.

The *Lezioni* are designed as preparatory for students who intend to take courses in which more advanced developments of algebraic geometry are given. In this task the authors have succeeded admirably. The student who masters Enriques and Chisini's lectures will have a foundation in algebraic geometry which cannot be matched anywhere else in the world.

Enriques himself promises to continue this work by treating in the same spirit algebraic surfaces or the algebraic functions of two variables.

The fourth volume contains the sixth book of the general treatise: *Elliptic and Abelian Functions*. In the first chapter, we find a very clear and concise treatment of elliptic integrals and functions with which every student of algebraic geometry should be familiar. One may of course expect that the geometric aspect of the theory is stressed in opportune places without impairing the rigor of the argument. Thus, the flex-configuration of the plane cubic, linear point-series and correspondences on elliptic curves are very adequately treated.

The second chapter is concerned with Abelian integrals and appears as an extension of the function-theoretical and geometric theories so beautifully explained in Chapter 1.

In the last chapter, the authors discuss the famous problem of inversion and Abelian functions. Here again we see at every turn the hand of master geometers handling an otherwise purely analytical theory.

The volume ends with an application of Abelian functions to hyperelliptic and Kummer surfaces. As in the preceding volumes, at the end of every chapter we find a very competent and accurate account of the historical development of the theory.

Enriques and Chisini have written a beautiful book which may be strongly recommended to student and teacher alike.

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