

the concepts of rational and birational correspondences. Lüroth's theorem and the remaining Plücker formulas are then derived. Finally valuations are defined and their connection with places is established. The last chapter is given over to linear series, applying them first to obtain a nonsingular birational transform of an irreducible curve. Study of the canonical series then leads to the genus of a curve and to the Riemann-Roch theorem. Two further topics bring the book to a close: partial classification of curves under birational equivalence leading to appropriate canonical forms, and treatment of the nonsingular cubic including Salmon's theorem on the cross-ratio.

A great deal of the book is given over to purely algebraic topics, making possible an exposition of the theory of curves which is completely rigorous. Indeed many of the curve-theoretic proofs are valid for the more general situations to which the reader might progress in his further study. On the other hand the exposition of the algebra makes no such provision for the reader's education. It is so extremely concise and so thoroughly tailored to the special purposes of the book that this reviewer believes its study to be a most uneconomical use of the reader's time.

The quantity of out and out algebraic geometry is relatively small, by comparison with older treatises, but its quality is very high. A question might be raised on the propriety of having the resolution of singularities take place before the student has studied parametrizations, for without them the proof is unnecessarily hard and the achievement of only ordinary singularities is not easily appreciated. With a few such exceptions the individual topics which are treated are treated well. Nevertheless, the total impact of the book is disappointing. The book might be very illuminating as a companion volume to one of the older works, but the beginner in the subject is not likely to benefit from it. He is given no awareness of the rich body of knowledge to which it relates, and, although he is told from time to time that a certain item is important, he sees no systematic working out of a basic problem which could independently justify his activity.

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*Weltsystem, Weltäther und die Relativitätstheorie.* By Karl Jellinek. Basel, Wepf, 1949. 15+450 pp. 45 Swiss fr.

The subtitle of this book on special and general relativity and on relativistic cosmology reads: *An introduction for the experimental natural scientist.*

The author's approach to the subject is often laborious, and there