considerations. The topics covered by Skorohod are: measurable polynomials (this is an abstraction of the Itô-Wiener theory of homogeneous chaos in Wiener space); absolute continuity and quasi-invariance under shifts and nonlinear transformations; and surface integrals and Gauss' formula in Hilbert spaces. (The last of these topics appears here for the first time.) In contrast, the book of Badrikian and Chevet includes: GB and GC-sets, $\epsilon$-entropy, a thorough discussion of the work of Sudakov with complete proofs (given for the first time) together with recent amplifications due to Chevet, and 0-1 phenomena and integrability properties of Gaussian measures. Of the two books, Badrikian and Chevet's is much more up-to-date and Skorohod's is much more accessible to the novice. Together they constitute a quite complete account of the state in which this art finds itself today; the one with its emphasis on computation, the other with its infatuation with generality and elegance. Unfortunately, neither one devotes any space to Feynman integration or the recent applications that this area has enjoyed in quantum field theory. On the other hand, if the success of these probabilistic techniques in physics continues, there will certainly be books forthcoming on that subject, and these books will then be appreciated for the groundwork which they have laid.

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*Geometric theory of algebraic space curves*, by S. S. Abhyankar and A. M. Sathaye, Lecture Notes in Mathematics, no. 423, Springer-Verlag, Berlin, Heidelberg, New York, 1974, xiv+302 pp., \$11.50.

Let $k$ be an algebraically closed field, for example $k = \mathbf{C}$ (the complex numbers) will do. An *affine algebraic variety* over $k$ is the solution set of a family $\{f_\alpha(x_1, \cdots, x_n)\}_\alpha$ of polynomials in $n$ variables (for some $n$) with coefficients in $k$. Actually, we should be more precise about where our solutions are located. If $A$ is a $k$-algebra (e.g., $A = k$ itself, or $A =$ some field extension of $k$) then we can evaluate the polynomials $f_\alpha(x_1, \cdots, x_n)$ on $n$-tuples $\langle a_1, \cdots, a_n\rangle$ from $A$. Hence, it makes sense to consider those $n$-tuples from $A$ for which all the polynomials $f_\alpha$ vanish. These $n$-tuples are the points of our variety $V$ *with values in* $A$ (*or rational over* $A$). The whole variety, V, should be thought of as the collection of all the sets, $V(A)$, consisting of the points of $V$ with values in $A$ for all $k$-algebras $A$.

Classically, geometers considered only the case in which the $k$-algebra $A$ was a field; since the book under review adopts a classical position, we shall also restrict attention to the case when $A$ is a field. If $\Omega$ denotes an algebraically closed field of infinite transcendence degree over $k$, then it turns out that all phenomena of the classical variety $V$ may be captured in the set $V(\Omega)$. We can therefore replace the somewhat nebulous idea of the collection $V(K)$ (where $K$ is a field over $k$) by the one set $V(\Omega)$. Even more