that the Bishop-Phelps theorem holds in *complex* Banach spaces with the (real) Radon-Nikodym property. Similarly, a striking application of the Huff-Morris theorem (concerning the existence of extreme points in any nonempty closed bounded subset of a Banach space with the Radon-Nikodym property) is P. Mankiewicz's proof that complex Banach spaces with the Radon-Nikodym property have unique complex structure; the omission of this result is unfortunate, again because the question of uniqueness of complex structures on complex Banach spaces (the complex Mazur-Ulam problem) is open in general. Almost nothing is said about the role of the Radon-Nikodym property in the study of operator ideals, a subject arguably central to the study of the geometry of Banach spaces. Again, nothing is said about the part played by the Radon-Nikodym property in abstract harmonic analysis, both commutative and noncommutative. All this is nitpicking though since the objective of the monograph is *not* to tell everything there is about the Radon-Nikodym property, but rather to tell about a substantial amount of certain geometric aspects of the Radon-Nikodym property. In this regard, Dick Bourgin has done an admirable job.

JOE DIESTEL

BULLETIN (New Series) OF THE
AMERICAN MATHEMATICAL SOCIETY
Volume 11, Number 2, October 1984

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

Differential geometry of foliations, by Bruce L. Reinhart, Ergebnisse der Mathematik und ihrer Grenzgebiete, vol. 99, Springer-Verlag, Berlin, 1983, ix + 194 pp., $42.00. ISBN 3-5401-2269-9

A structure on a differentiable manifold of dimension m can be defined by requiring that there exist an atlas whose coordinate transformations satisfy a special condition. In the case of a foliated structure of dimension p, the transformations must map the points in their domains lying in a p-plane parallel to some fixed subspace $R^p \subseteq R^m$ into a p-plane of the same type. Thinking of the layers of an onion or the pages of a magazine suggests the right mental picture when $p = 2$ and $m = 3$. A structure defined by an atlas determines a reduction of the structure group of the tangent bundle to the group consisting of the tangent maps to coordinate transformations. (A similar game can also be played with higher order jet bundles.) Integrability problems in differential geometry are concerned with reversing this process, that is, with determining if a given reduction can be realized in the way described, at least up to some kind of equivalence. For instance, Reeb's "Problème Fondamental" in the first monograph on foliations [2] was to determine whether a manifold that admits a continuous field of p-planes can also be given a foliated structure of dimension p.

Reinhart, with the pardonable exaggeration of an enthusiast, subtitles his book *The fundamental integrability problem*. I would have been more comfortable with the indefinite article, but he probably wanted to show both his intention of including much more within foliations than the minimal structure described above and that the field is of fundamental importance as a rich