

inform the reader concerning the historical connection here. At any rate, these Eisenstein series afford another way of constructing automorphic forms on  $\mathfrak{H}_n$  with respect to  $\Gamma$ , and are in a certain technical sense complementary to the Poincaré series constructed earlier. Siegel concludes this final chapter with investigation of the field of modular functions (read "automorphic functions with respect to  $\Gamma$ "). He first shows that that field at least *is* generated by the Eisenstein series (very little is known about generation of the ring or algebra of modular forms except for Igusa's results for very small  $n$ ), and then establishes that it is an algebraic function field of finite degree over a purely transcendental extension of  $\mathbb{C}$  of degree  $n(n+1)/2$ . The proof of the former fact is Siegel's own (Math. Ann., 1939), and although Siegel established the second fact in the same paper, the proof of it here is due to Andreotti and Grauert, who base their proof on a property of pseudoconcavity connected with the modular group.

Although minor flaws, such as the scarcity of references to the extensive bibliography when there is not space to pursue a subject, and the laxness of the proofreader(s) exist, this reviewer's opinion is that the good far outweighs these trivial shortcomings. These are small blemishes, and the work as a whole stands out for its excellent treatment of a broad subject, and what, for obvious reasons of space, it lacks in completeness, it more than makes up for in inspirational quality.

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*Algebraic graph theory*, by Norman Biggs, Cambridge Tracts in Mathematics No. 67, Cambridge University Press, 1974, vii+170 pp., \$11.70

*Combinatorial theory seminar*, by Jacobus H. van Lint, Eindhoven University of Technology, Lecture Notes in Mathematics No. 382, Springer-Verlag, 1974, vi+131 pp., DM 18

Some of the most satisfying and fruitful developments in mathematics have occurred when bridges have been discovered between seemingly disparate branches of the subject. Then the results and methods of the one branch have become applicable to the other, and at best there has been an equal flow in the reverse direction also. Thus the Zeta function of Riemann allowed complex function theory to illuminate the theory of the distribution of prime numbers, and thereby the theory of entire functions was stimulated also.

Prerequisites, for maximum impact in such situations, are naturalness