

8. Frobenius, "Ueber die Leibnitzsche Reihe," *Journal für Mathematik*, volume 89 (1880).
9. Gronwall, "Ueber die Laplacesche Reihe," *Mathematische Annalen*, volume 74 (1913).
10. Gronwall, "Ueber die Summierbarkeit der Reihen von Laplace und Legendre," *Mathematische Annalen*, volume 75 (1914).
11. Haar, "Zur Theorie der orthogonalen Funktionensysteme," Dissertation, Göttingen (1909), and *Mathematische Annalen*, volume 69 (1910).
12. Haar, "Ueber die Legendresche Reihe," *Rendiconti del Circolo Matematico di Palermo*, volume 32 (1911).
13. G. H. Hardy, "On the summability of Fourier's series," *Proceedings of the London Mathematical Society*, series 2, volume 12 (1913).
14. Lebesgue, "Recherches sur la convergence des séries de Fourier," *Mathematische Annalen*, volume 61 (1905).
15. C. N. Moore, "The summability of the developments in Bessel functions, with applications," *Transactions of the American Mathematical Society*, volume 10 (1909).
16. C. N. Moore, "On convergence factors in double series and the double Fourier's series," *Transactions of the American Mathematical Society*, volume 14 (1913).
17. C. N. Moore, "On the summability of the double Fourier's series of discontinuous functions," *Mathematische Annalen*, volume 74 (1913).
18. Marcel Riesz, "Sur les séries de Dirichlet et les séries entières," *Comptes Rendus*, volume 149 (1909).
19. W. H. Young, "Ueber eine Summationsmethode für die Fouriersche Reihe," *Leipziger Berichte*, volume 53 (1911).
20. W. H. Young, "On infinite integrals involving a generalization of the sine and cosine functions," *Quarterly Journal of Mathematics*, volume 43 (1912).
21. W. H. Young, "On multiple Fourier series," *Proceedings of the London Mathematical Society*, series 2, volume 11 (1912).

MODULAR SYSTEMS.

The Algebraic Theory of Modular Systems. By F. S. MACAULAY. [Cambridge Tracts in Mathematics and Mathematical Physics, No. 19.] Cambridge University Press, 1916. xiv + 112 pp.

A MODULAR system is an infinite aggregate of polynomials in n variables x_1, x_2, \dots, x_n , defined by the property that if F, F_1, F_2 belong to the system, $F_1 + F_2$ and AF also belong to the system, where A is any polynomial in x_1, x_2, \dots, x_n . Hence if F_1, F_2, \dots, F_k belong to a modular system so also does $A_1F_1 + A_2F_2 + \dots + A_kF_k$, where A_1, A_2, \dots, A_k are arbitrary polynomials in x_1, x_2, \dots, x_n . In the algebraic theory (to which this tract is devoted) polynomials such as F and aF , where a is a quantity not involving the variables, are regarded as the same polynomial.