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Titolo	Siegel Modular Forms : A Classical and Representation-Theoretic Approach / / by Ameya Pitale
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Nota di contenuto	Introduction -- Lecture 1:Introduction to Siegel modular forms -- Lecture 2: Examples -- Lecture 3: Hecke Theory and L-functions -- Lecture 4: Non-vanishing of primitive Fourier coefficients and applications -- Lecture 5: Applications of properties of L-functions -- Lecture 6: Cuspidal automorphic representations corresponding to Siegel modular forms -- Lecture 7: Local representation theory of GSp4 (p) -- Lecture 8: Bessel models and applications -- Lecture 9: Analytic and arithmetic properties of GSp4 x GL2 L-functions -- Lecture 10: Integral representation of the standard L-function.
Sommario/riassunto	This monograph introduces two approaches to studying Siegel modular forms: the classical approach as holomorphic functions on the Siegel upper half space, and the approach via representation theory on the symplectic group. By illustrating the interconnections shared by the two, this book fills an important gap in the existing literature on modular forms. It begins by establishing the basics of the classical theory of Siegel modular forms, and then details more advanced topics. After this, much of the basic local representation theory is presented. Exercises are featured heavily throughout the volume, the solutions of which are helpfully provided in an appendix. Other topics considered include Hecke theory, Fourier coefficients, cuspidal automorphic

representations, Bessel models, and integral representation. Graduate students and young researchers will find this volume particularly useful. It will also appeal to researchers in the area as a reference volume. Some knowledge of GL(2) theory is recommended, but there are a number of appendices included if the reader is not already familiar.