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Titolo Non-Archimedean L-functions and arithmetical Siegel modular forms /

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Nota di contenuto Introduction -- Non-Archimedean analytic functions, measures and

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and nearly holomorphic Siegel modular forms.

Sommario/riassunto This book is devoted to the arithmetical theory of Siegel modular forms

and their L-functions. The central object are L-functions of classical Siegel modular forms whose special values are studied using the Rankin-Selberg method and the action of certain differential operators on modular forms which have nice arithmetical properties. A new method of p-adic interpolation of these critical values is presented. An important class of p-adic L-functions treated in the present book are p-adic L-functions of Siegel modular forms having logarithmic growth (which were first introduced by Amice, Velu and Vishik in the elliptic modular case when they come from a good super singular reduction of elliptic curves and abelian varieties). The given construction of these p-adic L-functions uses precise algebraic properties of the arithmetical Shimura differential operator. The book could be very useful for postgraduate students and for non-experts giving a quick access to a

rapidly developing domain of algebraic number theory: the arithmetical theory of L-functions and modular forms.