[eBooks] Automorphic Forms Shimura Varieties And L Functions Laurent Clozel

Right here, we have countless books **automorphic forms shimura varieties and l functions laurent clozel** and collections to check out. We additionally come up with the money for variant types and furthermore type of the books to browse. The usual book, fiction, history, novel, scientific research, as with ease as various additional sorts of books are readily clear here.

As this automorphic forms shimura varieties and l functions laurent clozel, it ends stirring brute one of the favored ebook automorphic forms shimura varieties and l functions laurent clozel collections that we have. This is why you remain in the best website to see the unbelievable book to have.

Automorphic Forms, Shimura Varieties, and L-functions-Laurent Clozel 1990
p-Adic Automorphic Forms on Shimura Varieties-Haruzo Hida 2012-12-06 In the early years of the 1980s, while I was visiting the Institute for Ad vanced Study (lAS) at Princeton as a postdoctoral member, I got a fascinating view, studying congruence modulo a prime among elliptic modular forms, that an automorphic L-function of a given algebraic group G should have a canon ical p-adic counterpart of several variables. I immediately decided to find out the reason behind this phenomenon and to develop the theory of ordinary p-adic automorphic forms, allocating 10 to 15 years from that point, putting off the intended arithmetic study of Shimura varieties via L-functions and Eisenstein series (for which I visited lAS). Although it took more than 15 years, we now know (at least conjecturally) the exact number of variables for a given G, and it has been shown that this is a universal phenomenon valid for holomorphic automorphic forms on Shimura varieties and also for more general (nonholomorphic) cohomological automorphic forms on automorphic manifolds (in a markedly different way). When I was asked to give a series of lectures in the Automorphic Semester in the year 2000 at the Emile Borel Center (Centre Emile Borel) at the Poincare Institute in Paris, I chose to give an exposition of the theory of p-adic (ordinary) families of such automorphic forms p-adic analytically de pending on their weights, and this book is the outgrowth of the lectures given there.
Automorphic Forms and Shimura Varieties of PGSp (2)-Yuval Zvi Flicker 2005 The area of automorphic representations is a natural continuation of studies in the 19th and 20th centuries on number theory and modular forms. A guiding principle is a reciprocity law relating infinite dimensional automorphic representations with finite dimensional Galois representations. Simple relations on the Galois side reflect deep relations on the automorphic side, called ?liftings.' This in-depth book concentrates on an initial example of the lifting, from a rank 2 symplectic group PGSp(2) to PGL(4), reflecting the natural embedding of Sp(2,ó) in SL(4, ó). It develops the technique of comparing twisted and stabilized trace formulae. It gives a detailed classification of the automorphic and admissible representation of the rank two symplectic PGSp(2) by means of a definition of packets and quasi-packets, using character relations and trace formulae identities. It also shows multiplicity one and rigidity theorems for the discrete spectrum.Applications include the study of the decomposition of the cohomology of an associated Shimura variety, thereby linking Galois representations to geometric automorphic representations.To put these results in a general context, the book concludes with a technical introduction to Langlands' program in the area of automorphic representations. It includes a proof of known cases of Artin's conjecture.
Automorphic Forms, Shimura Varieties, and L-functions-Laurent Clozel 1990
Automorphic Forms, Representations and L-Functions-Armand Borel 1979-06-30 Part 2 contains sections on Automorphic representations and L-functions, Arithmetical algebraic geometry and L-functions
Shimura Varieties-Thomas Haines 2020-01-31 A concise and comprehensive introduction to trace formula methods in the study of Shimura varieties and associated Galois representations.
The Geometry and Cohomology of Some Simple Shimura Varieties. (AM-151)-Michael Harris 2001-11-04 This book aims first to prove the local Langlands conjecture for GLn over a p-adic field and, second, to identify the action of the decomposition group at a prime of bad reduction on the l-adic cohomology of the "simple" Shimura varieties. These two problems go hand in hand. The results represent a major advance in algebraic number theory, finally proving the conjecture first proposed in Langlands's 1969 Washington lecture as a non-abelian generalization of local class field theory. The local Langlands conjecture for GLn(K), where K is a p-adic field, asserts the existence of a correspondence, with certain formal properties, relating n-dimensional representations of the Galois group of K with the representation theory of the locally compact group GLn(K). This book constructs a candidate for such a local Langlands correspondence on the vanishing cycles attached to the bad reduction over the integer ring of K of a certain family of Shimura varieties. And it proves that this is roughly compatible with the global Galois correspondence realized on the cohomology of the same Shimura varieties. The local Langlands conjecture is obtained as a corollary. Certain techniques developed in this book should extend to more general Shimura varieties, providing new instances of the local Langlands conjecture. Moreover, the geometry of the special fibers is strictly analogous to that of Shimura curves and can be expected to have applications to a variety of questions in number theory.
Automorphic Forms and Galois Representations-Fred Diamond 2014-10-16 Part two of a two-volume collection exploring recent developments in number theory related to automorphic forms and Galois representations.
Topological Automorphic Forms-Mark Behrens 2010-02-22 The authors apply a theorem of J. Lurie to produce cohomology theories associated to certain Shimura varieties of type $U(1,n-1)$. These cohomology theories of topological automorphic forms (TAF) are related to Shimura varieties in the same way that TMF is related to the moduli space of elliptic curves.
Harmonic Analysis, the Trace Formula, and Shimura Varieties-Clay Mathematics Institute. Summer School 2005 The modern theory of automorphic forms, embodied in what has come to be known as the Langlands program, is an extraordinary unifying force in mathematics. It proposes fundamental relations that tie arithmetic information from number theory and algebraic geometry with analytic information from harmonic analysis and group representations. These "reciprocity laws", conjectured by Langlands, are still largely unproved. However, their capacity to unite large areas of mathematics insures that they will be a central area of study for years to come. The goal of this volume is to provide an entry point into this exciting and challenging field. It is directed on the one hand at graduate students and professional mathematicians who would like to work in the area. The longer articles in particular represent an attempt to enable a reader to master some of the more difficult techniques. On the other hand, the book will also be useful to mathematicians who would like simply to understand something of the subject. They will be able to consult the expository portions of the various articles. The volume is centered around the trace formula and Shimura varieties. These areas are at the heart of the subject, but they have been especially difficult to learn because of a lack of expository material. The volume aims to rectify the problem. It is based on the courses given at the 2003 Clay Mathematics Institute Summer School. However, many of the articles have been expanded into comprehensive introductions, either to the trace formula or the theory of Shimura varieties, or to some aspect of the interplay and application of the two areas.
Hodge Cycles, Motives, and Shimura Varieties-Pierre Deligne 2009-03-20
On the Stabilization of the Trace Formula-Laurent Clozel 2011
Introduction to the Arithmetic Theory of Automorphic Functions-Goro Shimura 1971-08-21 The theory of automorphic forms is playing increasingly important roles in several branches of mathematics, even in physics, and is almost ubiquitous in number theory. This book introduces the reader to the subject and in particular to elliptic modular forms with emphasis on their number-theoretical aspects. After two chapters geared toward elementary levels, there follows a detailed treatment of the theory of Hecke operators, which associate zeta functions to modular forms. At a more advanced level, complex multiplication of elliptic curves and abelian varieties is discussed. The main question is the construction of abelian extensions of certain algebraic number fields, which is traditionally called "Hilbert's twelfth problem." Another advanced topic is the determination of the zeta function of an algebraic curve uniformized by modular functions, which supplies an indispensable background for the recent proof of Fermat's last theorem by Wiles.
Automorphic Forms and Galois Representations-Fred Diamond 2014-10-16 Part one of a two-volume collection exploring recent developments in number theory related to automorphic forms and Galois representations.
An Introduction to the Langlands Program-Joseph Bernstein 2013-12-11 This book presents a broad, user-friendly introduction to the Langlands program, that is, the theory of automorphic forms and its connection with the theory of L-functions and other fields of mathematics. Each of the twelve chapters focuses on a particular topic devoted to special cases of the program. The book is suitable for graduate students and researchers.
Elliptic Curves and Arithmetic Invariants-Haruzo Hida 2013-06-13 This book contains a detailed account of the result of the author's recent Annals paper and JAMS paper on arithmetic invariant, including μ-invariant, L-invariant, and similar topics. This book can be regarded as an introductory text to the

author's previous book p-Adic Automorphic Forms on Shimura Varieties. Written as a down-to-earth introduction to Shimura varieties, this text includes many examples and applications of the theory that provide motivation for the reader. Since it is limited to modular curves and the corresponding Shimura varieties, this book is not only a great resource for experts in the field, but it is also accessible to advanced graduate students studying number theory. Key topics include non-triviality of arithmetic invariants and special values of L-functions; elliptic curves over complex and p-adic fields; Hecke algebras; scheme theory; elliptic and modular curves over rings; and Shimura curves.
The Semi-simple Zeta Function of Quaternionic Shimura Varieties-Harry Reimann 1997-04-14 This monograph is concerned with the Shimura variety attached to a quaternion algebra over a totally real number field. For any place of good (or moderately bad) reduction, the corresponding (semi-simple) local zeta function is expressed in terms of (semi-simple) local L-functions attached to automorphic representations. In an appendix a conjecture of Langlands and Rapoport on the reduction of a Shimura variety in a very general case is restated in a slightly stronger form. The reader is expected to be familiar with the basic concepts of algebraic geometry, algebraic number theory and the theory of automorphic representation.
Automorphic Forms on GL (3,TR)-D. Bump 2006-12-08
Cohomology of Drinfeld Modular Varieties, Part 2, Automorphic Forms, Trace Formulas and Langlands Correspondence-Gérard Laumon 1996 This book follows the author's first volume on Drinfeld modular varieties, and is pitched at graduate students.
Modular Forms and Galois Cohomology-Haruzo Hida 2000-06-29 Comprehensive account of recent developments in arithmetic theory of modular forms, for graduates and researchers.
Compactifications of Pel-Type Shimura Varieties and Kuga Families with Ordinary Loci-Kai-Wen Lan 2017 This book is important for active researchers and graduate students who need to understand the above-mentioned recent works, and is written with such users of the theory in mind, providing plenty of explanations and background materials, which should be helpful for people working in similar areas. It also contains precise internal and external references, and an index of notation and terminologies. These are useful for readers to quickly locate materials they need.
Arithmetic Compactifications of PEL-Type Shimura Varieties-Kai-Wen Lan 2013-03-21 By studying the degeneration of abelian varieties with PEL structures, this book explains the compactifications of smooth integral models of all PEL-type Shimura varieties, providing the logical foundation for several exciting recent developments. The book is designed to be accessible to graduate students who have an understanding of schemes and abelian varieties. PEL-type Shimura varieties, which are natural generalizations of modular curves, are useful for studying the arithmetic properties of automorphic forms and automorphic representations, and they have played important roles in the development of the Langlands program. As with modular curves, it is desirable to have integral models of compactifications of PEL-type Shimura varieties that can be described in sufficient detail near the boundary. This book explains in detail the following topics about PEL-type Shimura varieties and their compactifications: A construction of smooth integral models of PEL-type Shimura varieties by defining and representing moduli problems of abelian schemes with PEL structures An analysis of the degeneration of abelian varieties with PEL structures into semiabelian schemes, over noetherian normal complete adic base rings A construction of toroidal and minimal compactifications of smooth integral models of PEL-type Shimura varieties, with detailed descriptions of their structure near the boundary Through these topics, the book generalizes the theory of degenerations of polarized abelian varieties and the application of that theory to the construction of toroidal and minimal compactifications of Siegel moduli schemes over the integers (as developed by Mumford, Faltings, and Chai).
Smooth Compactifications of Locally Symmetric Varieties-Avner Ash 2010-01-14 The new edition of this celebrated and long-unavailable book preserves the original book's content and structure and its unrivalled presentation of a universal method for the resolution of a class of singularities in algebraic geometry.
Automorphic Forms and Related Geometry: Assessing the Legacy of I.I. Piatetski-Shapiro-James W. Cogdell 2014-04-01 This volume contains the proceedings of the conference Automorphic Forms and Related Geometry: Assessing the Legacy of I.I. Piatetski-Shapiro, held from April 23-27, 2012, at Yale University, New Haven, CT. Ilya I. Piatetski-Shapiro, who passed away on 21 February 2009, was a leading figure in the theory of automorphic forms. The conference attempted both to summarize and consolidate the progress that was made during Piatetski-Shapiro's lifetime by him and a substantial group of his co-workers, and to promote future work by identifying fruitful directions of further investigation. It was organized around several themes that reflected Piatetski-Shapiro's main foci of work and that have promise for future development: functoriality and converse theorems; local and global -functions and their periods; -adic -functions and arithmetic geometry; complex geometry; and analytic number theory. In each area, there were talks to review the current state of affairs with special attention to Piatetski-Shapiro's contributions, and other talks to report on current work and to outline promising avenues for continued progress. The contents of this volume reflect most of the talks that were presented at the conference as well as a few additional contributions. They all represent various aspects of the legacy of Piatetski-Shapiro.
Cohomology of Arithmetic Groups and Automorphic Forms-Jean-Pierre Labesse 1990-11-28 Cohomology of arithmetic groups serves as a tool in studying possible relations between the theory of automorphic forms and the arithmetic of algebraic varieties resp. the geometry of locally symmetric spaces. These proceedings will serve as a guide to this still rapidly developing area of mathematics. Besides two survey articles, the contributions are original research papers.
Geometric Modular Forms and Elliptic Curves-Haruzo Hida 2012 This book provides a comprehensive account of the theory of moduli spaces of elliptic curves (over integer rings) and its application to modular forms. The construction of Galois representations, which play a fundamental role in Wiles' proof of the Shimura?Taniyama conjecture, is given. In addition, the book presents an outline of the proof of diverse modularity results of two-dimensional Galois representations (including that of Wiles), as well as some of the author's new results in that direction.In this new second edition, a detailed description of Barsotti?Tate groups (including formal Lie groups) is added to Chapter 1. As an application, a down-to-earth description of formal deformation theory of elliptic curves is incorporated at the end of Chapter 2 (in order to make the proof of regularity of the moduli of elliptic curve more conceptual), and in Chapter 4, though limited to ordinary cases, newly incorporated are Ribet's theorem of full image of modular p-adic Galois representation and its generalization to ?big? ?-adic Galois representations under mild assumptions (a new result of the author). Though some of the striking developments described above is out of the scope of this introductory book, the author gives a taste of present day research in the area of Number Theory at the very end of the book (giving a good account of modularity theory of abelian ?-varieties and ?-curves).
Arithmetic and Geometry-Michael Artin 2013-11-11
Lectures on Automorphic L-functions-James W. Cogdell James W. Cogdell, Lectures on L-functions, converse theorems, and functoriality for GL_n: Preface Modular forms and their L-functions Automorphic forms Automorphic representations Fourier expansions and multiplicity one theorems Eulerian integral representations Local L-functions: The non-Archimedean case The unramified calculation Local L-functions: The Archimedean case Global L-functions Converse theorems Functoriality Functoriality for the classical groups Functoriality for the classical groups, II Henry H. Kim, Automorphic L-functions: Introduction Chevalley groups and their properties Cuspidal representations L-groups and automorphic L-functions Induced representations Eisenstein series and constant terms L-functions in the constant terms Meromorphic continuation of L-functions Generic representations and their Whittaker models Local coefficients and non-constant terms Local Langlands correspondence Local L-functions and functional equations Normalization of intertwining operators Holomorphy and bounded in vertical strips Langlands functoriality conjecture Converse theorem of Cogdell and Piatetski-Shapiro Functoriality of the symmetric cube Functoriality of the symmetric fourth Bibliography M. Ram Murty, Applications of symmetric power L-functions: Preface The Sato-Tate conjecture Maass wave forms The Rankin-Selberg method Oscillations of Fourier coefficients of cusp forms Poincare series Kloosterman sums and Selberg's conjecture Refined estimates for Fourier coefficients of cusp forms Twisting and averaging of L-series The Kim-Sarnak theorem Introduction to Artin L-functions Zeros and poles of Artin L-functions The Langlands-Tunnell theorem Bibliography
Harmonic Analysis, Group Representations, Automorphic Forms, and Invariant Theory-Roger Howe 2007 This volume carries the same title as that of an international conference held at the National University of Singapore, 9OCo11 January 2006 on the occasion of Roger E. Howe''s 60th birthday. Authored by leading members of the Lie theory community, these contributions, expanded from invited lectures given at the conference, are a fitting tribute to the originality, depth and influence of Howe''s mathematical work. The range and diversity of the topics will appeal to a broad audience of research mathematicians and graduate students interested in symmetry and its profound applications. Sample Chapter(s). Foreword (21 KB). Chapter 1: The Theta Correspondence Over R (342 KB). Contents: The Theta Correspondence over R (J Adams); The Heisenberg Group, SL (3, R), and Rigidity (A iap et al.); Pfaffians and Strategies for Integer Choice Games (R Evans & N Wallach); When is an L -Function Non-Vanishing in Part of the Critical Strip? (S Gelbart); Cohomological Automorphic Forms on Unitary Groups, II: Period Relations and Values of L -Functions (M Harris); The Inversion Formula and Holomorphic Extension of the Minimal Representation of the Conformal Group (T Kobayashi & G Mano); Classification des S(r)ries Discr tes pour Certains Groupes Classiques p- Adiques (C Moeglin); Some Algebras of Essentially Compact Distributions of a Reductive p -Adic Group (A Moy & M Tadic); Annihilators of Generalized Verma Modules of the Scalar Type for Classical Lie Algebras (T Oshima); Branching to a Maximal Compact Subgroup (D A Vogan, Jr.); Small Semisimple Subalgebras of Semisimple Lie Algebras (J F Willenbring

& G J Zuckerman). Readership: Graduate students and research mathematicians in harmonic analysis, group representations, automorphic forms and invariant theory."

Proceedings of the International Colloquium on Cycles, Motives and Shimura Varieties, Mumbai 2008-V. Srinivas 2010 This volume covers the proceedings of the International Colloquium organised by the Tata Institute of Fundamental Research in January 2008, one of a series of Colloquia going back to 1956. It covers a wide spectrum of mathematics, ranging over algebraic geometry, topology, automorphic forms and number theory. Algebraic cycles form the basis for the construction of Motives, and conjectures about Motives depend ultimately on important problems related to algebraic cycles, like the Hodge and the Tata Conjectures. Shimura Varieties provide interesting, nontrivial instances of these fundamental problems. On the other hand, the Motives of Shimura Varieties are of great interest in automorphic forms and number theory. This book contains refereed articles by leading experts in these fields, containing original results, as well as expository material, on these areas.

On the Cohomology of Certain Non-Compact Shimura Varieties (AM-173)-Sophie Morel 2010-01-04 This book studies the intersection cohomology of the Shimura varieties associated to unitary groups of any rank over Q. In general, these varieties are not compact. The intersection cohomology of the Shimura variety associated to a reductive group G carries commuting actions of the absolute Galois group of the reflex field and of the group G(Af) of finite adelic points of G. The second action can be studied on the set of complex points of the Shimura variety. In this book, Sophie Morel identifies the Galois action--at good places--on the G(Af)-isotypical components of the cohomology. Morel uses the method developed by Langlands, Ihara, and Kottwitz, which is to compare the Grothendieck-Lefschetz fixed point formula and the Arthur-Selberg trace formula. The first problem, that of applying the fixed point formula to the intersection cohomology, is geometric in nature and is the object of the first chapter, which builds on Morel's previous work. She then turns to the group-theoretical problem of comparing these results with the trace formula, when G is a unitary group over Q. Applications are then given. In particular, the Galois representation on a G(Af)-isotypical component of the cohomology is identified at almost all places, modulo a non-explicit multiplicity. Morel also gives some results on base change from unitary groups to general linear groups.

The Semi-simple Zeta Function of Quaternionic Shimura Varieties-Harry Reimann 1997-04-14 This monograph is concerned with the Shimura variety attached to a quaternion algebra over a totally real number field. For any place of good (or moderately bad) reduction, the corresponding (semi-simple) local zeta function is expressed in terms of (semi-simple) local L-functions attached to automorphic representations. In an appendix a conjecture of Langlands and Rapoport on the reduction of a Shimura variety in a very general case is restated in a slightly stronger form. The reader is expected to be familiar with the basic concepts of algebraic geometry, algebraic number theory and the theory of automorphic representation.

Algebraic and Analytic Methods in Representation Theory- 1996-09-27 This book is a compilation of several works from well-recognized figures in the field of Representation Theory. The presentation of the topic is unique in offering several different points of view, which should makethe book very useful to students and experts alike. Presents several different points of view on key topics in representation theory, from internationally known experts in the field

The Geometric and Arithmetic Volume of Shimura Varieties of Orthogonal Type-Fritz Hörmann 2014-11-05 This book outlines a functorial theory of integral models of (mixed) Shimura varieties and of their toroidal compactifications, for odd primes of good reduction. This is the integral version, developed in the author's thesis, of the theory invented by Deligne and Pink in the rational case. In addition, the author develops a theory of arithmetic Chern classes of integral automorphic vector bundles with singular metrics using the work of Burgos, Kramer and Kühn. The main application is calculating arithmetic volumes or "heights" of Shimura varieties of orthogonal type using Borcherds' famous modular forms with their striking product formula--an idea due to Bruinier-Burgos-Kühn and Kudla. This should be seen as an Arakelov analogue of the classical calculation of volumes of orthogonal locally symmetric spaces by Siegel and Weil. In the latter theory, the volumes are related to special values of (normalized) Siegel Eisenstein series. In this book, it is proved that the Arakelov analogues are related to special derivatives of such Eisenstein series. This result gives substantial evidence in the direction of Kudla's conjectures in arbitrary dimensions. The validity of the full set of conjectures of Kudla, in turn, would give a conceptual proof and far-reaching generalizations of the work of Gross and Zagier on the Birch and Swinnerton-Dyer conjecture. Titles in this series are co-published with the Centre de Recherches Mathématiques.

Motives-Uwe Jannsen 1994 Motives were introduced in the mid-1960s by Grothendieck to explain the analogies among the various cohomology theories for algebraic varieties, to play the role of the missing rational cohomology, and to provide a blueprint for proving Weil's conjectures about the zeta function of a variety over a finite field. Over the last ten years or so, researchers in various areas--Hodge theory, algebraic K-theory, polylogarithms, automorphic forms, L-functions, ℓ-adic representations, trigonometric sums, and algebraic cycles--have discovered that an enlarged (and in part conjectural) theory of ``mixed'' motives indicates and explains phenomena appearing in each area. Thus the theory holds the potential of enriching and unifying these areas. This is the second of two volumes containing the revised texts of nearly all the lectures presented at the AMS-IMS-SIAM Joint Summer Research Conference on Motives, held in Seattle, in 1991. A number of related works are also included, making for a total of forty-seven papers, from general introductions to specialized surveys to research papers.

Noncommutative Geometry and Number Theory-Caterina Consani 2007-12-18 In recent years, number theory and arithmetic geometry have been enriched by new techniques from noncommutative geometry, operator algebras, dynamical systems, and K-Theory. This volume collects and presents up-to-date research topics in arithmetic and noncommutative geometry and ideas from physics that point to possible new connections between the fields of number theory, algebraic geometry and noncommutative geometry. The articles collected in this volume present new noncommutative geometry perspectives on classical topics of number theory and arithmetic such as modular forms, class field theory, the theory of reductive p-adic groups, Shimura varieties, the local L-factors of arithmetic varieties. They also show how arithmetic appears naturally in noncommutative geometry and in physics, in the residues of Feynman graphs, in the properties of noncommutative tori, and in the quantum Hall effect.

Formes Automorphes (I): Questions about slopes of modular forms-Jacques Tilouine 2005 This volume is the first of a series of two devoted to automorphic forms from a geometric and arithmetic point of view. They also deal with certain parts of the Langlands program. The themes treated in this volume include p-adic modular forms, the local Langlands correspondence for $GL(n)$, the cohomology of Shimura varieties, their reduction modulo p, and their stratification by Newton polygons. The book is suitable for graduate students and research mathematicians interested in number theory, algebra, and algebraic geometry.

Boundary Cohomology of Shimura Varieties, III-Michael Harris 2001 In this article, third of a series, we complete the verification of the following fact. The nerve spectral sequence for the cohomology of the Borel-Serre boundary of a Shimura variety Sh is a spectral sequence of mixed Hodge-de Rham structures over the field of definition of its canonical model. To achieve that, we develop the machinery of automorphic vector bundles on mixed Shimura varieties, for the latter enter in the boundary of the toroidal compactifications of Sh: and study the nerve spectral sequence for the automorphic vector bundles and the toroidal boundary. We also extend the technique of averting issues of base-change by taking cohomology with growth conditions. We give and apply formulas for the Hodge gradation of the cohomology of both Sh and its Borel-Serre boundary.

Arithmetic Duality Theorems-J. S. Milne 1986 Here, published for the first time, are the complete proofs of the fundamental arithmetic duality theorems that have come to play an increasingly important role in number theory and arithmetic geometry. The text covers these theorems in Galois cohomology, ,tale cohomology, and flat cohomology and addresses applications in the above areas. The writing is expository and the book will serve as an invaluable reference text as well as an excellent introduction to the subject.

Elementary Dirichlet Series and Modular Forms-Goro Shimura 2007-08-06 A book on any mathematical subject beyond the textbook level is of little value unless it contains new ideas and new perspectives. It helps to include new results, provided that they give the reader new insights and are presented along with known old results in a clear exposition. It is with this philosophy that the author writes this volume. The two subjects, Dirichlet series and modular forms, are traditional subjects, but here they are treated in both orthodox and unorthodox ways. Regardless of the unorthodox treatment, the author has made the book accessible to those who are not familiar with such topics by including plenty of expository material.