

Read Online Automorphic Forms Representations And L Functions A Borel

Thank you for reading **automorphic forms representations and l functions a borel**. Maybe you have knowledge that, people have search numerous times for their favorite novels like this automorphic forms representations and l functions a borel, but end up in infectious downloads. Rather than enjoying a good book with a cup of tea in the afternoon, instead they cope with some infectious bugs inside their desktop computer.

automorphic forms representations and l functions a borel is available in our book collection an online access to it is set as public so you can get it instantly.

Our digital library hosts in multiple countries, allowing you to get the most less latency time to download any of our books like this one.

Kindly say, the automorphic forms representations and l functions a borel is universally compatible with any devices to read

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
Automorphic Forms, Representations and L -Functions-Symposium in Pure Mathematics 1979 Part 1 contains sections on Reductive groups, representations, Automorphic forms and representations)
Automorphic Forms, Representations, and L-functions-Armand Borel 1979
Automorphic Forms, Representations, and L-functions- 1979
Automorphic Forms and Representations-Daniel Bump 1998-11-28 This book takes advanced graduate students from the foundations to topics on the research frontier.
Automorphic Forms on $GL(3, \mathbb{R})$ -D. Bump 2006-12-08
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.
Automorphic Forms and L-Functions for the Group $GL(n, \mathbb{R})$ -Dorian Goldfeld 2006-08-03 L-functions associated to automorphic forms encode all classical number theoretic information. They are akin to elementary particles in physics. This 2006 book provides an entirely self-contained introduction to the theory of L-functions in a style accessible to graduate students with a basic knowledge of classical analysis, complex variable theory, and algebra. Also within the volume are many new results not yet found in the literature. The exposition provides complete detailed proofs of results in an easy-to-read format using many examples and without the need to know and remember many complex definitions. The main themes of the book are first worked out for $GL(2, \mathbb{R})$ and $GL(3, \mathbb{R})$, and then for the general case of $GL(n, \mathbb{R})$. In an appendix to the book, a set of Mathematica functions is presented, designed to allow the reader to explore the theory from a computational point of view.
Automorphic Representations and L-Functions for the General Linear Group-Dorian Goldfeld 2011 This modern, graduate-level textbook does not assume prior knowledge of representation theory. Includes numerous concrete examples and exercises.
Automorphic Representations and L-Functions for the General Linear Group-Dorian Goldfeld 2011-04-21 This graduate-level textbook provides an elementary exposition of the theory of automorphic representations and L-functions for the general linear group in an adelic setting. Definitions are kept to a minimum and repeated when reintroduced so that the book is accessible from any entry point, and with no prior knowledge of representation theory. The book includes concrete examples of global and local representations of $GL(n)$, and presents their associated L-functions. In Volume 1, the theory is developed from first principles for $GL(1)$, then carefully extended to $GL(2)$ with complete detailed proofs of key theorems. Several proofs are presented for the first time, including Jacquet's simple and elegant proof of the tensor product theorem. In Volume 2, the higher rank situation of $GL(n)$ is given a detailed treatment. Containing numerous exercises by Xander Faber, this book will motivate students and researchers to begin working in this fertile field of research.
Automorphic Representations and L-Functions for the General Linear Group-Dorian Goldfeld 2011-04-21 This graduate-level textbook provides an elementary exposition of the theory of automorphic representations and L-functions for the general linear group in an adelic setting. Definitions are kept to a minimum and repeated when reintroduced so that the book is accessible from any entry point, and with no prior knowledge of representation theory. The book includes concrete examples of global and local representations of $GL(n)$, and presents their associated L-functions. In Volume 1, the theory is developed from first principles for $GL(1)$, then carefully extended to $GL(2)$ with complete detailed proofs of key theorems. Several proofs are presented for the first time, including Jacquet's simple and elegant proof of the tensor product theorem. In Volume 2, the higher rank situation of $GL(n)$ is given a detailed treatment. Containing numerous exercises by Xander Faber, this book will motivate students and researchers to begin working in this fertile field of research.
Lectures on Automorphic L-functions-James W. Cogdell, Lectures on L -functions, converse theorems, and functoriality for SO_{2n} : 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 Automorphic Forms on Adele Groups-Stephen S. Gelbart 1975-03-21 This volume investigates the interplay between the classical theory of automorphic forms and the modern theory of representations of adèle groups. Interpreting important recent contributions of Jacquet and Langlands, the author presents new and previously inaccessible results, and systematically develops explicit consequences and connections with the classical theory. The underlying theme is the decomposition of the regular representation of the adèle group of $GL(2)$. A detailed proof of the celebrated trace formula of Selberg is included, with a discussion of the possible range of applicability of this formula. Throughout the work the author emphasizes new examples and problems that remain open within the general theory. TABLE OF CONTENTS: 1. The Classical Theory 2. Automorphic Forms and the Decomposition of $L^2(PSL(2, \mathbb{R}))$ 3. Automorphic Forms as Functions on the Adele Group of $GL(2)$ 4. The Representations of $GL(2)$ over Local and Global Fields 5. Cusp Forms and Representations of the Adele Group of $GL(2)$ 6. Hecke Theory for $GL(2)$ 7. The Construction of a Special Class of Automorphic Forms 8. Eisenstein Series and the Continuous Spectrum 9. The Trace Formula for $GL(2)$ 10. Automorphic Forms on a Quaternion Algebr?

Eisenstein Series and Automorphic Representations-Philipp Fleig 2018-06-30 Detailed exposition of automorphic representations and their relation to string theory, for mathematicians and theoretical physicists.
Contributions to Automorphic Forms, Geometry, and Number Theory-Haruzo Hida 2004-03-11 In Contributions to Automorphic Forms, Geometry, and Number Theory, Haruzo Hida, Dinakar Ramakrishnan, and Freydoon Shahidi bring together a distinguished group of experts to explore automorphic forms, principally via the associated L-functions, representation theory, and geometry. Because these themes are at the cutting edge of a central area of modern mathematics, and are related to the philosophical base of Wiles' proof of Fermat's last theorem, this book will be of interest to working mathematicians and students alike. Never previously published, the contributions to this volume expose the reader to a host of difficult and thought-provoking problems. Each of the extraordinary and noteworthy mathematicians in this volume makes a unique contribution to a field that is currently seeing explosive growth. New and powerful results are being proved, radically and continually changing the field's make up. Contributions to Automorphic Forms, Geometry, and Number Theory will likely lead to vital interaction among researchers and also help prepare students and other young mathematicians to enter this exciting area of pure mathematics. Contributors: Jeffrey Adams, Jeffrey D. Adler, James Arthur, Don Blasius, Siegfried Boecherer, Daniel Bump, William Casselman, Laurent Clozel, James Cogdell, Laurence Corwin, Solomon Friedberg, Masaaki Furusawa, Benedict Gross, Thomas Hales, Joseph Harris, Michael Harris, Jeffrey Hoffstein, Hervé Jacquet, Dihua Jiang, Nicholas Katz, Henry Kim, Victor Kreiman, Stephen Kudla, Philip Kutzko, V. Lakshmiabai, Robert Langlands, Erez Lapid, Ilya Piatetski-Shapiro, Dipendra Prasad, Stephen Rallis, Dinakar Ramakrishnan, Paul Sally, Freydoon Shahidi, Peter Sarnak, Rainer Schulze-Pillot, Joseph Shalika, David Soudry, Ramin Takloo-Bigash, Yuri Tschinkel, Emmanuel Ullmo, Marie-France Vignéras, Jean-Loup Waldspurger.

Representation Theory and Automorphic Forms-T. N. Bailey 1997 This book is a course in representation theory of semisimple groups, automorphic forms and the relations between these two subjects written by some of the world's leading experts in these fields. It is based on the 1996 instructional conference of the International Centre for Mathematical Sciences in Edinburgh. The book begins with an introductory treatment of structure theory and ends with an essay by Robert Langlands on the current status of functoriality. All papers are intended to provide overviews of the topics they address, and the authors have supplied extensive bibliographies to guide the reader who wants more detail. The aim of the articles is to treat representation theory with two goals in mind: 1) to help analysts make systematic use of Lie groups in work on harmonic analysis, differential equations, and mathematical physics and 2) to provide number theorists with the representation-theoretic input to Wiles's proof of Fermat's Last Theorem. Features: Discussion of representation theory from many experts' viewpoints Treatment of the subject from the foundations through recent advances Discussion of the analogies between analysis of cusp forms and analysis on semisimple symmetric spaces, which have been at the heart of research breakthroughs for 40 years Extensive bibliographies

L-Functions and Automorphic Forms-Jan Hendrik Bruinier 2018-02-22 This book presents a collection of carefully refereed research articles and lecture notes stemming from the Conference 'Automorphic Forms and L-Functions', held at the University of Heidelberg in 2016. The theory of automorphic forms and their associated L-functions is one of the central research areas in modern number theory, linking number theory, arithmetic geometry, representation theory, and complex analysis in many profound ways. The 19 papers cover a wide range of topics within the scope of the conference, including automorphic L-functions and their special values, p-adic modular forms, Eisenstein series, Borcherds products, automorphic periods, and many more.

Representation Theory and Automorphic Forms-Toshiyuki Kobayashi 2007-10-10 This volume uses a unified approach to representation theory and automorphic forms. It collects papers, written by leading mathematicians, that track recent progress in the expanding fields of representation theory and automorphic forms and their association with number theory and differential geometry. Topics include: Automorphic forms and distributions, modular forms, visible-actions, Dirac cohomology, holomorphic forms, harmonic analysis, self-dual representations, and Langlands Functoriality Conjecture, Both graduate students and researchers will find inspiration in this volume.

Automorphic Forms and L-functions: Local aspects-Stephen S. Gelbart 2009 This book is the second of two volumes, which represent leading themes of current research in automorphic forms and representation theory of reductive groups over local fields. Articles in this volume mainly represent global aspects of automorphic forms. Among the topics are the trace formula; functoriality; representations of reductive groups over local fields; the relative trace formula and periods of automorphic forms; Rankin - Selberg convolutions and L-functions; and, p-adic L-functions. The articles are written by leading researchers in the field, and bring the reader, advanced graduate students and researchers alike, to the frontline of the vigorous research in these deep, vital topics. The companion volume ("Contemporary Mathematics, Volume 488") is devoted to global aspects of automorphic forms.

Topics in Classical Automorphic Forms-Henryk Iwaniec 1997 The main purpose of the book is to present the reader with various perspectives of the theory of automorphic forms. In addition to detailed and often nonstandard exposition of familiar topics of the theory, with a particular emphasis on analytic aspects, special attention is paid to such subjects as theta-functions and representations of integers by quadratic forms.

Automorphic Forms-Anton Deitmar 2012-08-29 Automorphic forms are an important complex analytic tool in number theory and modern arithmetic geometry. They played for example a vital role in Andrew Wiles's proof of Fermat's Last Theorem. This text provides a concise introduction to the world of automorphic forms using two approaches: the classic elementary theory and the modern point of view of adèles and representation theory. The reader will learn the important aims and results of the theory by focusing on its essential aspects and restricting it to the 'base field' of rational numbers. Students interested for example in arithmetic geometry or number theory will find that this book provides an optimal and easily accessible introduction into this topic.

Advances in the Theory of Automorphic Forms and Their L -functions-Dihua Jiang 2016-04-29 This volume contains the proceedings of the workshop on "Advances in the Theory of Automorphic Forms and Their L-functions" held in honor of James Cogdell's 60th birthday, held from October 16-25, 2013, at the Erwin Schrödinger Institute (ESI) at the University of Vienna. The workshop and the papers contributed to this volume circle around such topics as the theory of automorphic forms and their L-functions, geometry and number theory, covering some of the recent approaches and advances to these subjects. Specifically, the papers cover aspects of representation theory of p-adic groups, classification of automorphic representations through their Fourier coefficients and their liftings, L-functions for classical groups, special values of L-functions, Howe duality, subconvexity for L-functions, Kloosterman integrals, arithmetic geometry and cohomology of arithmetic groups, and other important problems on L-functions, nodal sets and geometry.

Automorphic Forms, Representation Theory and Arithmetic-S. Gelbart 2013-12-01 International Colloquium an Automorphic Forms, Representation Theory and Arithmetic. Published for the Tata Institute of Fundamental Research, Bombay
Multiple Dirichlet Series, L-functions and Automorphic Forms-Daniel Bump 2012-07-09 Multiple Dirichlet Series, L-functions and Automorphic Forms gives the latest

advances in the rapidly developing subject of Multiple Dirichlet Series, an area with origins in the theory of automorphic forms that exhibits surprising and deep connections to crystal graphs and mathematical physics. As such, it represents a new way in which areas including number theory, combinatorics, statistical mechanics, and quantum groups are seen to fit together. The volume also includes papers on automorphic forms and L-functions and related number-theoretic topics. This volume will be a valuable resource for graduate students and researchers in number theory, combinatorics, representation theory, mathematical physics, and special functions. Contributors: J. Beineke, B. Brubaker, D. Bump, G. Chinta, G. Cornelissen, C.A. Diaconu, S. Frechette, S. Friedberg, P. Garrett, D. Goldfeld, P.E. Gunnells, B. Heim, J. Hundley, D. Ivanov, Y. Komori, A.V. Kontorovich, O. Lorscheid, K. Matsumoto, P.J. McNamara, S.J. Patterson, M. Suzuki, H. Tsumura. Automorphic Forms and Representations-Daniel Bump 1997 This book takes advanced graduate students from the foundations to topics on the research frontier. 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.

Automorphic Forms on $GL(2, \mathbb{H})$ -Jaquet 2006-11-15
Lectures on Automorphic L-functions-James W. Cogdell 2009 This book provides a comprehensive account of the crucial role automorphic L -functions play in number theory and in the Langlands program, especially the Langlands functoriality conjecture. There has been a recent major development in the Langlands functoriality conjecture by the use of automorphic L -functions, namely, by combining converse theorems of Cogdell and Piatetski-Shapiro with the Langlands-Shahidi method. This book provides a step-by-step introduction to these developments and explains how the Langlands functoriality conjecture implies solutions to several outstanding conjectures in number theory, such as the Ramanujan conjecture, Sato-Tate conjecture, and Artin's conjecture. It would be ideal for an introductory course in the Langlands program. Titles in this series are co-published with The Fields Institute for Research in Mathematical Sciences (Toronto, Ontario, Canada). Table of Contents: James W.Cogdell, Lectures on L -functions, converse theorems, and functoriality for SO_{2n} : 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. This is a reprint of the 2004 original. (FIM/20.5)

Harmonic Analysis, Group Representations, Automorphic Forms and Invariant Theory-L-Functions and the Oscillator Representation-Stephen Rallis 2006-11-15 These notes are concerned with showing the relation between L-functions of classical groups (*F1 in particular) and *F2 functions arising from the oscillator representation of the dual reductive pair *F1 *F3 O(Q). The problem of measuring the nonvanishing of a *F2 correspondence by computing the Petersson inner product of a *F2 lift from *F1 to O(Q) is considered. This product can be expressed as the special value of an L-function (associated to the standard representation of the L-group of *F1) times a finite number of local Euler factors (measuring whether a given local representation occurs in a given oscillator representation). The key ideas used in proving this are (i) new Rankin integral representations of standard L-functions, (ii) see-saw dual reductive pairs and (iii) Siegel-Weil formula. The book addresses readers who specialize in the theory of automorphic forms and L-functions and the representation theory of Lie groups. N

Modern Analysis of Automorphic Forms By Example-Paul Garrett 2018-08-31 Volume 1 of a two-volume introduction to the analytical aspects of automorphic forms, featuring proofs of critical results with examples.

Automorphic Representations, L-Functions and Applications: Progress and Prospects-James W. Cogdell 2011-06-24 This volume is the proceedings of the conference on Automorphic Representations, L-functions and Applications: Progress and Prospects, held at the Department of Mathematics of The Ohio State University, March 27-30, 2003, in honor of the 60th birthday of Steve Rallis. The theory of automorphic representations, automorphic L-functions and their applications to arithmetic continues to be an area of vigorous and fruitful research. The contributed papers in this volume represent many of the most recent developments and directions, including Rankin-Selberg L-functions (Bump, Ginzburg-Jiang-Rallis, Lapid-Rallis) the relative trace formula (Jacquet, Mao-Rallis) automorphic representations (Gan-Gurevich, Ginzburg-Rallis-Soudry) representation theory of p-adic groups (Baruch, Kudla-Rallis, Mosglin, Cogdell-Piatetski-Shapiro-Shahidi) p-adic methods (Harris-Li-Skinner, Vignéras), and arithmetic applications (Chinta-Friedberg-Hoffstein). The survey articles by Bump, on the Rankin-Selberg method, and by Jacquet, on the relative trace formula, should be particularly useful as an introduction to the key ideas about these important topics. This volume should be of interest both to researchers and students in the area of automorphic representations, as well as to mathematicians in other areas interested in having an overview of current developments in this important field.

Automorphic Forms and Even Unimodular Lattices-Gaëtan Chenevier 2019-02-25 This book includes a self-contained approach of the general theory of quadratic forms and integral Euclidean lattices, as well as a presentation of the theory of automorphic forms and Langlands' conjectures, ranging from the first definitions to the recent and deep classification results due to James Arthur. Its connecting thread is a question about lattices of rank 24: the problem of p-neighborhoods between Niemeier lattices. This question, whose expression is quite elementary, is in fact very natural from the automorphic point of view, and turns out to be surprisingly intriguing. We explain how the new advances in the Langlands program mentioned above pave the way for a solution. This study proves to be very rich, leading us to classical themes such as theta series, Siegel modular forms, the triality principle, L-functions and congruences between Galois representations. This monograph is intended for any mathematician with an interest in Euclidean lattices, automorphic forms or number theory. A large part of it is meant to be accessible to non-specialists.

The Selberg-Arthur Trace Formula-Salahuddin Shokranian 1992-02-12 This book based on lectures given by James Arthur discusses the trace formula of Selberg and Arthur. The emphasis is laid on Arthur's trace formula for $GL(r)$, with several examples in order to illustrate the basic concepts. The book will be useful and stimulating reading for graduate students in automorphic forms, analytic number theory, and non-commutative harmonic analysis, as well as researchers in these fields. Contents: I. Number Theory and Automorphic Representations.1.1. Some problems in classical number theory. 1.2. Modular forms and automorphic representations; II. Selberg's Trace Formula 2.1. Historical Remarks, 2.2. Orbital integrals and Selberg's trace formula, 2.3.Three examples, 2.4. A necessary condition, 2.5. Generalizations and applications; III. Kernel Functions and the Convergence Theorem, 3.1. Preliminaries on $GL(r)$, 3.2. Combinatorics and reduction theory, 3.3. The convergence theorem; IV. The Adic Theory, 4.1. Basic facts; V. The Geometric Theory, 5.1. The $JT(f)$ and $JT(f)$ distributions, 5.2. A geometric I-function, 5.3. The weight functions; VI. The Geometric Expansion of the Trace Formula, 6.1. Weighted orbital integrals, 6.2. The unipotent distribution; VII. The Spectral Theory, 7.1. A review of the Eisenstein series, 7.2. Cusp forms, truncation, the trace formula; VIII.The Invariant Trace Formula and its Applications, 8.1. The invariant trace formula for $GL(r)$, 8.2. Applications and remarks

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.

Elliptic Curves, Modular Forms, and Their L-functions-Alvaro Lozano-Robledo 2011 Many problems in number theory have simple statements, but their solutions require a deep understanding of algebra, algebraic geometry, complex analysis, group representations, or a combination of all four. The original simply stated problem can be obscured in the depth of the theory developed to understand it. This book is an introduction to some of these problems, and an overview of the theories used nowadays to attack them, presented so that the number theory is always at the forefront of the discussion. Lozano-Robledo gives an introductory survey of elliptic curves, modular forms, and L -functions. His main goal is to provide the reader with the big picture of the surprising connections among these three families of mathematical objects and their meaning for number theory. As a case in point, Lozano-Robledo explains the modularity theorem and its famous consequence, Fermat's Last Theorem. He also discusses the Birch and Swinnerton-Dyer Conjecture and other modern conjectures. The book begins with some motivating problems and includes numerous concrete examples throughout the text, often involving actual numbers, such as 3, 4, 5, $\sqrt{\frac{3344161}{747348}}$, and $\sqrt{\frac{224403517704336969245575130906674863160948472041}{8912332268928859588025535178967163570016480830}}$. The theories of elliptic curves, modular forms, and L -functions are too vast to be covered in a single volume, and their proofs are outside the scope of the undergraduate curriculum. However, the primary objects of study, the statements of the main theorems, and their corollaries are within the grasp of advanced undergraduates. This book concentrates on motivating the definitions, explaining the statements of the theorems and conjectures, making connections, and providing lots of examples, rather than dwelling on the hard proofs. The book succeeds if, after reading the text, students feel compelled to study elliptic curves and modular forms in all their glory.

Automorphic Forms and Galois Representations: Volume 1-Fred Diamond 2014-10-16 Automorphic forms and Galois representations have played a central role in the development of modern number theory, with the former coming to prominence via the celebrated Langlands program and Wiles' proof of Fermat's Last Theorem. This two-volume collection arose from the 94th LMS-EPSCR Durham Symposium on 'Automorphic Forms and Galois Representations' in July 2011, the aim of which was to explore recent developments in this area. The expository articles and research papers across the two volumes reflect recent interest in p-adic methods in number theory and representation theory, as well as recent progress on topics from anabelian geometry to p-adic Hodge theory and the Langlands program. The topics covered in volume one include the Shafarevich Conjecture, effective local Langlands correspondence, p-adic L-functions, the fundamental lemma, and other topics of contemporary interest.

Ottawa Lectures on Admissible Representations of Reductive P-adic Groups-Clifton Cunningham 2009-01-01
The Arithmetic and Spectral Analysis of Poincaré Series-James W. Cogdell 2014-07-14 The Arithmetic and Spectral Analysis of Poincaré series deals with the spectral properties of Poincaré series and their relation to Kloosterman sums. In addition to Poincaré series for an arbitrary Fuchsian group of the first kind, the spectral expansion of the Kloosterman-Selberg zeta function is analyzed, along with the adelic theory of Poincaré series and Kloosterman sums over a global function field. This volume is divided into two parts and begins with a discussion on Poincaré series and Kloosterman sums for Fuchsian groups of the first kind. A conceptual proof of Kuznetsov's formula and its generalization are presented in terms of the spectral analysis of Poincaré series in the framework of representation theory. An analysis of the spectral expansion of the Kloosterman-Selberg zeta function is also included. The second part develops the adelic theory of Poincaré series and Kloosterman sums over a global function field. The main result here is to show that in this context the analogue of the Linnik conjecture can be derived from the Ramanujan conjecture over function fields. Whittaker models, Kirillov models, and Bessel functions are also considered, along with the Kloosterman-spectral formula, convergence, and continuation. This book will be a valuable resource for students of mathematics.

The Descent Map from Automorphic Representations of $GL(n)$ to Classical Groups-David Ginzburg 2011 This book introduces the method of automorphic descent, providing an explicit inverse map to the (weak) Langlands functorial lift from generic, cuspidal representations on classical groups to general linear groups. The essence of this method is the study of certain Langier coefficients of GelfandOcoGraev type, or of FourierOCoJacobi type when applied to certain residual Eisenstein series. This book contains a complete account of this automorphic descent, with complete, detailed proofs. The book will be of interest to graduate students and mathematicians, who specialize in automorphic forms and in representation theory of reductive groups over local fields. Relatively self-contained, the content of some of the chapters can serve as topics for graduate students seminars.