

1. Record Nr.	UNISA996466474003316
Autore	Shokranian Salahoddin <1948->
Titolo	The Selberg-Arthur trace formula : based on lectures by James Arthur / / Salahoddin Shokranian
Pubbl/distr/stampa	Berlin ; ; Heidelberg : , : Springer-Verlag, , 1992
ISBN	3-540-46659-2
Edizione	[1st ed. 1992.]
Descrizione fisica	1 online resource (IX, 99 p.)
Collana	Lecture Notes in Mathematics ; ; Volume 1503
Disciplina	512.7
Soggetti	Selberg trace formula
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di contenuto	Contents: Number Theory and Automorphic Representations: Some problems in classical number theory. Modular forms and automorphic representations -- Selberg's Trace Formula: Historical Remarks. Orbital integrals and Selberg's trace formula. Three examples. A necessary condition. Generalizations and applications -- Kernel Functions and the Convergence Theorem: Preliminaries on $GL(r)$ . Combinatorics and reduction theory. The convergence theorem -- The Adélic Theory: Basic facts -- The Geometric Theory: The $JTO(f)$ and $JT(f)$ distributions. A geometric I-function. The weight functions -- The Geometric Expansion of the Trace Formula: Weighted orbital integrals. The unipotent distribution -- The Spectral Theory: A review of the Eisenstein series. Cusp forms, truncation, the trace formula -- The Invariant Trace Formula and Its Applications: The in-variant trace formula for $GL(r)$ . Applications and remarks -- Bibliography -- Subject Index.
Sommario/riassunto	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 Ad lic Theory, 4.1. Basic facts; V. The Geometric Theory, 5.1. The  $JTO(f)$  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.

---