Record Nr. UNINA9910154742103321 Autore Vogan David A. **Titolo** Unitary Representations of Reductive Lie Groups. (AM-118), Volume 118 / / David A. Vogan Pubbl/distr/stampa Princeton, NJ:,: Princeton University Press,, [2016] ©1988 1-4008-8238-9 **ISBN** Descrizione fisica 1 online resource (320 pages) Collana Annals of Mathematics Studies;; 349 Disciplina 512/.55 Soggetti Lie groups Representations of Lie groups Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Note generali Bibliographic Level Mode of Issuance: Monograph Nota di bibliografia Bibliography. Frontmatter -- CONTENTS -- ACKNOWLEDGEMENTS -- INTRODUCTION Nota di contenuto -- Chapter 1. COMPACT GROUPS AND THE BOREL-WEIL THEOREM --Chapter 2. HARISH-CHANDRA MODULES -- Chapter 3. PARABOLIC INDUCTION -- Chapter 4. STEIN COMPLEMENTARY SERIES AND THE UNITARY DUAL OF GL(n,) -- Chapter 5. COHOMOLOGICAL PARABOLIC INDUCTION: ANALYTIC THEORY -- Chapter 6. COHOMOLOGICAL PARABOLIC INDUCTION: ALGEBRAIC THEORY -- Interlude. THE IDEA OF UNIPOTENT REPRESENTATIONS -- Chapter 7. FINITE GROUPS AND UNIPOTENT REPRESENTATIONS -- Chapter 8. LANGLANDS' PRINCIPLE OF FUNCTORIALITY AND UNIPOTENT REPRESENTATIONS -- Chapter 9. PRIMITIVE IDEALS AND UNIPOTENT REPRESENTATIONS -- Chapter 10. THE ORBIT METHOD AND UNIPOTENT REPRESENTATIONS -- Chapter 11. E-MULTIPLICITIES AND UNIPOTENT REPRESENTATIONS -- Chapter 12. ON THE DEFINITION OF UNIPOTENT REPRESENTATIONS -- Chapter EXHAUSTION -- REFERENCES -- Backmatter Sommario/riassunto This book is an expanded version of the Hermann Weyl Lectures given at the Institute for Advanced Study in January 1986. It outlines some of what is now known about irreducible unitary representations of real reductive groups, providing fairly complete definitions and references. and sketches (at least) of most proofs. The first half of the book is

devoted to the three more or less understood constructions of such representations: parabolic induction, complementary series, and

cohomological parabolic induction. This culminates in the description of all irreducible unitary representation of the general linear groups. For other groups, one expects to need a new construction, giving "unipotent representations." The latter half of the book explains the evidence for that expectation and suggests a partial definition of unipotent representations.