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Sommario/riassunto	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 $L_2(\mathrm{PSL}(2, \mathbb{R}))$ 3. Automorphic Forms as Functions on the Adele Group of $\mathrm{GL}(2)$ 4. The Representations of $\mathrm{GL}(2)$ over Local and Global Fields 5. Cusp Forms and Representations of the Adele Group of $\mathrm{GL}(2)$ 6. Hecke Theory for $\mathrm{GL}(2)$ 7. The Construction of a Special Class of Automorphic Forms 8. Eisenstein Series and the Continuous Spectrum 9. The Trace Formula for $\mathrm{GL}(2)$ 10. Automorphic Forms on a Quaternion Algebra?
