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Titolo	An approach to the Selberg trace formula via the Selberg zeta-function // Jurgen Fischer
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Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Basic facts -- The trace of the iterated resolvent kernel -- The entire function ? associated with the selberg zeta-function -- The general selberg trace formula.
Sommario/riassunto	The Notes give a direct approach to the Selberg zeta-function for cofinite discrete subgroups of $SL(2, \mathbb{Z})$ acting on the upper half-plane. The basic idea is to compute the trace of the iterated resolvent kernel of the hyperbolic Laplacian in order to arrive at the logarithmic derivative of the Selberg zeta-function. Previous knowledge of the Selberg trace formula is not assumed. The theory is developed for arbitrary real weights and for arbitrary multiplier systems permitting an approach to known results on classical automorphic forms without the Riemann-Roch theorem. The author's discussion of the Selberg trace formula stresses the analogy with the Riemann zeta-function. For example, the canonical factorization theorem involves an analogue of the Euler constant. Finally the general Selberg trace formula is deduced easily from the properties of the Selberg zeta-function: this is similar to the procedure in analytic number theory where the explicit formulae are deduced from the properties of the Riemann zeta-function. Apart from the basic spectral theory of the Laplacian for cofinite groups the book is self-contained and will be useful as a quick approach to the Selberg zeta-function and the Selberg trace formula.

