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Titolo	Quantization and Non-holomorphic Modular Forms / / by André Unterberger
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Nota di bibliografia	Includes bibliographical references and indexes.
Nota di contenuto	Distributions associated with the non-unitary principal series -- Modular distributions -- The principal series of SL(2, ?) and the Radon transform -- Another look at the composition of Weyl symbols -- The Roelcke-Selberg decomposition and the Radon transform -- Recovering the Roelcke-Selberg coefficients of a function in L 2(???) -- The “product” of two Eisenstein distributions -- The roelcke-selberg expansion of the product of two eisenstein series: the continuous part -- A digression on kloosterman sums -- The roelcke-selberg expansion of the product of two eisenstein series: the discrete part -- The expansion of the poisson bracket of two eisenstein series -- Automorphic distributions on ?2 -- The Hecke decomposition of products or Poisson brackets of two Eisenstein series -- A generating series of sorts for Maass cusp-forms -- Some arithmetic distributions -- Quantization, products and Poisson brackets -- Moving to the forward light-cone: the Lax-Phillips theory revisited -- Automorphic functions associated with quadratic PSL(2, ?)-orbits in P 1(?) -- Quadratic orbits: a dual problem.
Sommario/riassunto	This is a new approach to the theory of non-holomorphic modular forms, based on ideas from quantization theory or pseudodifferential analysis. Extending the Rankin-Selberg method so as to apply it to the calculation of the Roelcke-Selberg decomposition of the product of two Eisenstein series, one lets Maass cusp-forms appear as residues of

simple, Eisenstein-like, series. Other results, based on quantization theory, include a reinterpretation of the Lax-Phillips scattering theory for the automorphic wave equation, in terms of distributions on R2 automorphic with respect to the linear action of SL(2,Z).