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The Whittaker Plancherel theorem

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Abstract. The purpose of this article is to give an exposition of a proof of the distributional form of the Whittaker Plancherel Theorem. The proof is an application of Harish-Chandra's Plancherel Theorem for real reductive groups and its exposition can be used as an introduction to Harish-Chandra's Plancherel Theorem. The paper follows the basic method in the author's original approach in his second volume on real reductive groups. An error in the calculation of the Whittaker Transform of a Harish-Chandra wave packet is fixed using a result of Raphaël Beuzart-Plessis.

Keywords and phrases: tempered, representation, isotypic component, Schwartz space, Harish-Chandra Schwartz Space, Whittaker functional, Jacquet integral

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