On a heat kernel for the index Whittaker transform

M. M. RODRIGUES and S. YAKUBOVICH

Abstract.

We introduce a notion of the heat kernel associated with the index Whittaker transform. We study its differential and mapping properties and a relationship with a family of the corresponding Weierstrass's type transforms.

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CIDMA - CENTER FOR RESEARCH AND DEVELOPMENT IN MATHEMATICS AND APPLICATIONS DEPARTMENT OF MATHEMATICS, UNIVERSITY OF AVEIRO CAMPUS UNIVERSITÁRIO DE SANTIAGO, 3810-193 AVEIRO, PORTUGAL *E-mail address*: mrodrigues@ua.pt

DEPARTMENT OF MATHEMATICS UNIVERSITY OF PORTO FACULDADE DE CIÊNCIAS RUA DO CAMPO ALEGRE 687, 4169-007 PORTO, PORTUGAL *E-mail address*: syakubov@fc.up.pt

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