An explicit formula for triples (Z, Z, Φ) in Jorgenson-Lang's fundamental class of functions is proved for a large class of (not necessarily differentiable nor even continuous) test functions.

As a consequence, the Selberg trace formula for a compact Riemann surface is valid for a larger class of test functions.

Taking an appropriate test function (which does not satisfy Jorgenson-Lang's nor Selberg's conditions), a new integral representation of the logarithmic derivative of the Selberg zeta function is obtained.

References

[1] M. Avdispahic, L. Smajlovic, ϕ-variation and Barner-Weil formula, *Math. Balkanica* **18** (2004), Fasc. 1-2

[2] M. Avdispahic, L. Smajlovic, Explicit formula for a fundamental class of functions, *Bull. Belg. Math. Soc. Simon Stevin* (to appear)

[3] J. Jorgenson, S. Lang, *Explicit formulas for regularized products and series*, Springer Lecture Notes in Mathematics **1593** (1994), 1-136