ADDENDUM

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Operator differentiable functions
IEOT (1990), Volume 13, Number 4, 461-487

After the paper had appeared in print, V.V. Peller has kindly informed us that the scope of the theory of double operator integrals of Birman and Solomjak should be limited to spectral measures defined on the Borel σ -field of metric spaces. In general, the cartesian product of two commuting spectral measures need not be strongly-countably-additive, and thus fails to be a spectral measure. A counter example is constructed in [BSV] and presented also in [BS].

The restriction of the theory to spectral measures defined on the Borel σ -field of metric spaces cause almost no loss of generality, since in all interesting cases in applications (and in particular, in the case of spectral measures associated with self-adjoint operators) - the spectral measures are of this type.

References:

- [BS] M.S. Birman and M.Z. Solomjak, Spectral Theory of Self-Adjoint Operators in Hilbert Spaces, Reidel (1989).
[BSV] M.S. Birman, M.Z. Solomjak and A.M. Vershik, The product of commuting spectral measures can be non-countably additive (Russian), Funktsional Anal.i ego pril. 13, 1(1979), 61-62.