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*On the non-commutative neutrix product  $\ln x_+ \circ x_+^{-s}$*

Comment.Math.Univ.Carolinae 37,2 (1996) 229-239.

**Abstract:** The non-commutative neutrix product of the distributions  $\ln x_+$  and  $x_+^{-s}$  is proved to exist for  $s = 1, 2, \dots$  and is evaluated for  $s = 1, 2$ . The existence of the non-commutative neutrix product of the distributions  $x_+^{-r}$  and  $x_+^{-s}$  is then deduced for  $r, s = 1, 2, \dots$  and evaluated for  $r = s = 1$ .

**Keywords:** distribution, delta-function, neutrix, neutrix limit, neutrix product

**AMS Subject Classification:** 46F10