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URBANIK TYPE SUBCLASSES OF FREE-INFINITELY DIVISIBLE TRANSFORMS

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Abstract. For the class of free-infinitely divisible transforms we introduce three families of increasing Urbanik type subclasses. They begin with the class of free-normal transforms and end up with the whole class of free-infinitely divisible transforms. Those subclasses are derived from the ones of classical infinitely divisible measures for which random integral representations are known. Special functions like Hurwitz–Lerch, polygamma and hypergeometric functions appear in kernels of the corresponding integral representations.

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