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ON AN EXTENSION OF MIN-SEMISTABLE DISTRIBUTIONS

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Abstract: This work focuses on a functional equation which extends the notion of min-semistable distributions. Our main results are an existence theorem and a characterization theorem for its solutions. The first establishes the existence of a class of solutions of this equation under a condition on the first zero on the positive axis of the associated structure function. The second shows that solutions belonging to a subclass of complementary distribution functions can be identified by their behavior at the origin. Our constructed solutions are in this subclass. The uniqueness question is also discussed.

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