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Cantor Integrals and Reconstruction of Coefficients of a Multiple Function Series with Lebesgue Non-integrable Sum

The notion of Cantor integral is introduced. Examples of Cantor integral are: Denjoy integral, Marzinkiewicz-Zygmund integral, James integral, Burkill integral etc. We proved that by iterated use of Cantor integral it is possible to calculate coefficients of multiple functional series even in the case when the sums of series are Lebesgue non-integrable.