Multisummability in ultraholomorphic classes associated to strongly regular sequences

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Summability of formal power series in a direction may be dealt with in the framework of ultraholomorphic classes associated to strongly regular sequences (in the sense of V. Thilliez) of positive real numbers. After commenting on some fundamental aspects of this tool, we will put forward a concept of multisummability in a direction with respect to a finite, ordered family of strongly regular sequences. As indicated by Professor S. Kamimoto, an alternative approach, following the ideas of B. Malgrange and J.-P. Ramis, is possible. We also discuss the construction of acceleration kernels and operators in this context, and show some applications of our technique.

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