

UNIVERSALITY AND DIRICHLET SERIES

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ABSTRACT. The purpose of this talk is to show the existence of a Dirichlet series $\sum_{n=1}^{\infty} \frac{a_n}{n^s}$ such that $\sum_{n=1}^{\infty} \frac{|a_n|}{n^{\sigma}}$ is convergent for every $\sigma > 0$ and satisfying the following “**universal property**”:

Given $K \subset \{z \in \mathbb{C} : \operatorname{Re} z \leq 0\}$ a compact set with connected complement and given $g : K \rightarrow \mathbb{C}$ a function continuous on K and holomorphic on its interior, there exists a subsequence (S_{N_j}) of $S_N = \sum_{n=1}^N \frac{a_n}{n^s}$ such that (S_{N_j}) converges uniformly to g on K .

Previously, we will survey on the concept of Universality that originally was associated to the behaviour of partial sums of the Taylor series expansion of an holomorphic function defined on the unit disk.

This is a joint work with R.M. Aron, F. Bayart, P. Gauthier and V. Nestoridis.