

"The Cauchy Condensation Test and its generalizations"

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Date: Friday, January 27, 2012, 2:00 PM

Location: Room 518, Bldg. 4

Abstract

The Cauchy Condensation Test, named after August-Louis Cauchy, is a well-known convergence test for infinite series:

For a positive non-increasing sequence (a_n) , the $\sum_{n=1}^{\infty} a_n$ converges if and only if the $\sum_{n=1}^{\infty} 2^n a_{2^n}$ converges.

In the previous talk, we derived the test, discussed and proved its generalizations, and posed an open question. In the present talk, we give a solution to the posed question.

The talk is accessible to anybody who has taken Calculus II