Bern-Fribourg Graduate Seminar

a seminar for Master and PhD students

Thursday 16^{th} November, 2023: 17:15 - 18:00 Room 2.52, Perolles 08, Fribourg

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Approximation of continuous function by entire function on the real line

Abstract

In this talk we review a few approximation results in complex analysis. For example the classical Carleman theorem says that when we have a continuous function f and a positive continuous error function on the real line, then there exists a holomorphic function approximating f at every real point up to the given error. The picture is that we have the real line sitting inside the complex plane, and continuous function on the real line can be approximated by a holomorphic function restricted to the real line. In higher dimensions, we shall mention Carleman-type approximation in the symplectic setting.