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## SEMINARIO

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### ***The injectivity of Borel map in Mandelbrojt Domains***

**Abstract:** A Mandelbrojt region is a (not necessarily sectorial) connected open set  $D$  in the Riemann surface of the logarithm with 0 in its boundary, symmetric with respect to a direction and with a positive opening (in a precise sense).

In 1952, S. Mandelbrojt gave a characterization of the injectivity of the asymptotic Borel mapping for the class of functions admitting uniform  $\mathbb{M}$ -asymptotic expansion in these domains, where the control of the remainders is specified in terms of a given weight sequence  $\mathbb{M}$  of positive real numbers. We hope to extend this criterion to the Carleman-Roumieu ultraholomorphic class in  $D$  consisting of the holomorphic functions with uniformly bounded derivatives in terms of the sequence  $\mathbb{M}$ .

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