

1134-03-282

Matthias Aschenbrenner* (matthias@math.ucla.edu), UCLA, Department of Mathematics, P.O. Box 951555, Los Angeles, CA 90095-1555. *Strong automorphisms of the differential field of transseries*. Preliminary report.

The differential field \mathbb{T} of transseries comes with a natural notion of infinite summation. I plan to explain what we know about the the group of automorphisms of \mathbb{T} which preserve infinite sums. This gives insight into definability in \mathbb{T} , and is motivated by our investigation of dimension for definable sets in \mathbb{T} . Joint work with Lou van den Dries and Joris van der Hoeven. (Received September 10, 2017)