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Max Mornev* (maxim.mornev@math.ethz.ch), ETH Zürich, D-MATH, Rämistrasse 101, 8092 Zürich, Switzerland. *Shtuka cohomology and special values of Goss L -functions.*

Assuming everywhere good reduction we generalize the class number formula of Taelman to Drinfeld modules over arbitrary coefficient rings. In order to prove this formula we develop a theory of shtukas and their cohomology. We also discuss a generalization of this formula to Drinfeld modules of arbitrary reduction type. (Received January 25, 2019)