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# VON STAUDT FOR $\mathbf{F}_q[T]$

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## Introduction

In 1935, Carlitz introduced and studied what is now called a rank one Drinfeld, or elliptic, module. His work, in [1], [2] and [3], is a very beautiful example of the general theory of Drinfeld modules, which was introduced by Drinfeld [5], in 1973. Carlitz's methods are very computational and should be widely applicable. Therefore, one reason for this paper is to collect the theorems in [1], [2] and [3] and to put them in a more modern setting.

The work of Carlitz in [2] and [3] is geared toward proving a von-Staudt type Theorem for the values of certain "zeta functions", (see 2). These "numbers" occur as the constant terms of the $q$-expansion of Eisenstein series of all ranks,

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