Drinfeld modules and extensions

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Abstract.   Our study focuses on extension groups in the category of Drinfeld modules and Anderson's t-modules, where in certain situations these groups are themselves respresentable by t-modules. We will discuss this phenomenon in general, with special interest in extensions by tensor powers of the Carlitz module. Furthermore, by extending Drinfeld modules by the Carlitz module we will consider an analogue of the Weil-Barsotti formula for abelian varieties. Joint work with N. Ramachandran.