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Moment of cubic  $L$ -functions over  $\mathbb{F}_q(t)$  at  $s = \frac{1}{3}$ .  
Joint work with P. Meisner (Gothenburg).

We compute the first moment of Dirichlet  $L$ -functions over  $\mathbb{F}_q[t]$  attached to cubic characters, evaluated at an arbitrary  $s \in (0, 1)$ . We find a transition term at the point  $s = \frac{1}{3}$ , using the deep connections between Dirichlet series of cubic Gauss sums and metaplectic Eisenstein series first introduced by Kubota to obtain cancellation between the principal sum and the dual sum at  $s = \frac{1}{3}$ .

We also explain how at  $s = \frac{1}{3}$ , the first moment matches corresponding statistics of the group of unitary matrices multiplied by a weight function.