

**On computing  $L'/L(1, \chi)$** 

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We describe an efficient algorithm to compute  $L'/L(1, \chi)$ , where  $\chi$  is a non-principal Dirichlet character mod  $q$ , and  $q$  is an odd prime. It uses the Fast Fourier Transform method combined with suitable properties of the involved special functions. In a series of papers developed starting from 2019, sometimes in collaboration with other colleagues, using such algorithm we were able to get results on the distribution of the Euler–Kronecker constants for cyclotomic fields, on the extremal values of  $|L'/L(1, \chi)|$  and of  $|L(1, \chi)|$ . If there will be enough time, I will also give some hints about other applications of such ideas.