

$\mathrm{Li}^{(p)}$ -service? An algorithm for computing p -adic polylogarithms

Coleman defined p -adic analogues of the complex polylogarithms in “Dilogarithms, regulators, and p -adic L -functions”, *Invent. Math.*, 69:171–208, 1982. We describe an algorithm for computing these p -adic polylogarithms up to a given precision.