

1035-11-1750

**Peter Stevenhagen\*** ([psh@math.leidenuniv.nl](mailto:psh@math.leidenuniv.nl)), Mathematisch Instituut, Universiteit Leiden, Postbus 9512, 2300 RA Leiden, Netherlands. *CM-constructions in genus 1 and 2*. Preliminary report.

As complex multiplication constructions of curves over finite fields lead to algorithms having a run time that is exponential in the size of the CM-data, it is natural to ask which output can be obtained from ‘small’ CM-input. We discuss results for genus 1 (joint work with Bröker) and genus 2 (joint with Lauter and Howe). (Received September 20, 2007)