1035-68-1649 **Pierrick Gaudry** (gaudry@lix.polytechnique.fr) and **Eric Schost*** (eschost@uwo.ca).

Genus 2 point-counting and Kummer surfaces.

Gaudry's formulas for pseudo-group operations on the Kummer surface associated to a curve of genus 2 suggest that some genus 2 cryptosystems should be competitive with, or faster than, their elliptic analogues. This talk will describe some computational aspects of genus 2 point-counting algorithms (over prime fields) adapted to this representation. (Received September 20, 2007)