## $\begin{array}{c} \text{Atelier} \ll L \text{a s\'ecurit\'e informatique et la cryptographie} \gg \\ 12\text{--}16 \text{ avril } 2010 \end{array}$

WORKSHOP ON COMPUTER SECURITY AND CRYPTOGRAPHY APRIL 12–16, 2010

## Pairing-friendly composite order bilinear groups

## Alice Silverberg

Department of Mathematics University of California, Irvine Rowland Hall Irvine, CA 92697-3875 USA

asilverb@math.uci.edu

*In joint work with Dan Boneh and Karl Rubin*, we apply the Cocks–Pinch method to obtain pairing-friendly composite order groups with prescribed embedding degree associated to ordinary elliptic curves, and we show that new security issues arise in the composite order setting.