

The Changing Face of Cryptography

Fred Piper

Information Security Group
Royal Holloway, University of London,
Egham, Surrey, TW20 0EX, UK

Abstract. The last few decades have seen cryptography ‘transform’ from a black art - practised mainly by governments, the military and a few financial organisations - to a popular science that is widely taught as an academic subject and features in a number of popular novels and films.

At the same time, cryptographic services have become much more widely used and are now a central feature of many e-commerce and other business applications. In this talk we will look at how technological advances have led to improved algorithm design and how the concept of public key cryptography has dramatically increased the range of cryptographic services that are available.