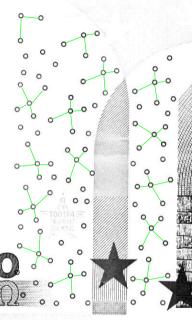
## The EURion Constellation

Markus Kuhn, Computer Laboratory, University of Cambridge, 2002–02–08









Modern colour photocopying machines refuse to copy many of the more recent banknotes, such as the pound, mark or euro. But how do they decide, what is a banknote? They search for a simple geometric pattern, consisting of five 1 mm large circles that appears on many more recent banknotes. usually in yellow, but often also in green or orange. The circles are particularly well visible in the blue channel, can be easily detected with a matched filter and tested for the presence of the characteristic constellation.