**JONATHAN JEDWAB**, Simon Fraser University, 8888 University Drive, Burnaby, BC V5A 1S6 *Proof of the Barker array conjecture* 

Using only elementary methods, we prove Alquaddoomi and Scholtz's conjecture of 1989, that no  $s \times t$  Barker array having s, t > 1 exists except when s = t = 2.

Joint work with J. A. Davis and K. W. Smith.