

1125-01-607

Ezra Brown* (ezbrown@math.vt.edu), 225 Stanger St., mail code 0123, Mathematics Department, Virginia Tech, Blacksburg, VA 24061-0123. *An incomplete chronology of the $(7, 3, 1)$ block design.* Preliminary report.

The $(7, 3, 1)$ block design has appeared in many times and places, frequently disguised as something else. In this talk, we trace the chronology of $(7, 3, 1)$ from its apparent beginnings in the mid-nineteenth century up to present time. We'll talk about difference sets, tournaments, finite geometries, normed algebras, Hadamard matrices, error-correcting codes, Venn diagrams, and many other matters. And what is meant by “apparent” beginnings? Well, come and find out. (Received September 07, 2016)