Some fundamental contributions of Gary Mullen to finite fields

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I will revise some of the many important contributions of Gary Mullen to finite fields research including the Hansen-Mullen Conjecture for irreducible and primitive polynomials with prescribed coefficients; the constructions of diverse combinatorial arrays such as ordered orthogonal arrays, (t, m, s)-nets, covering arrays and hypercubes; the deep study of several classes of permutation polynomials.

We also comment on other important contributions to finite fields research like being founder and Editor-in-Chief of the main journal of the area, Finite Fields and their Applications, as well as editor of several other important journals.