

A characterization result for Veroneseans

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Abstract

In [1] a characterization of the finite quadric Veronesean by means of properties of the set of its tangent spaces is proved. These tangent spaces form a *regular generalized dual arc*. We prove an extension result for regular generalized dual arcs, which is then used inductively to provide a similar characterization of the finite Veronesean.

References

- [1] J. A. THAS AND H. VAN MALDEGHEM Characterizations of the finite quadric Veroneseans $V_n^{2^n}$, *The Quarterly Journal of Mathematics*, **55**, (2004), 99–113.