

Schemes with the base of size 2

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A sufficient condition for a homogeneous coherent configuration (or simply a scheme) to have the (combinatorial) base of size 2 is proved. This result is applied to the Cartan scheme of a finite simple group G with BN-pair; by definition, it is the coherent configuration associated with the action of G on the right cosets of the Cartan subgroup $H = B \cap N$ by the right multiplications.