

Loops, graphs and projective 3-spaces

Introduce:

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Interviene:

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Abstract

We present two geometric techniques to construct loops.

The first one employs suitable edge-colorings of complete graphs and in this context we can characterize graphs giving rise to isomorphic or to isotopic loops.

The second one exploits techniques related to transversals and sections of groups. Here we consider the group $PGL_2(K)$ identified with the 3-dimensional projective space $PG(3;K)$ deprived of the point-set of a ruled quadric Q . Fixing a suitable subgroup D , we search for geometrically relevant subsets of $PG(3;K)\setminus Q$ which form a complete set of representatives for the left cosets of D and equip them with the structure of (left) loop.

Seminario

Lunedì 21 settembre 2015

Sala Riunioni, ore 14.30

Via dei Musei 41 - Brescia



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