SMARANDACHE COUNTER-PROJECTIVE GEOMETRY

by

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Abstract:
All three axioms of the projective geometry are denied in this new geometry.

Key Words: Projective Geometry, Smarandache Geometries, Geometrical Model

Introduction:
This type of geometry has been constructed by F.Smarandache[4] in 1969.

Let P, L be two sets, and r a relation included in PxL. The elements of P are called points, and those of L lines. When (p, l) belongs to r, we say that the line l contains the point p.
For these, one imposes the following COUNTER-AXIOMS:

(I) There exist: either at least two lines, or no line, that contains two given distinct points.

(II) Let p1, p2, p3 be three non-collinear points, and q1, q2 two distinct points. Suppose that {p1, q1, p3} and {p2, q2, p3} are collinear triples. Then the line containing p1, p2, and the line containing q1, q2 do not intersect.

(III) Every line contains at most two distinct points.

We consider that in a discontinuous space one can construct a model to this geometry.

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