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## A Parallelism based on the Jacobson Radical of a Ring

If two points of the projective line over a ring  $R$  are non-distant then they are also said to be *parallel*. This terminology goes back to the projective line over the real dual numbers, where parallel points represent parallel spears of the Euclidean plane. In general, this parallelism of points is not an equivalence relation.

We present another concept of “parallelism” on the projective line over a ring. In order to avoid ambiguity we call it the *radical parallelism*, since it reflects the *Jacobson radical* of  $R$ . We establish some properties and applications of the radical parallelism which turns out to be an equivalence relation.

### References:

A. BLUNCK, H. HAVLICEK: Radical Parallelism on Projective Lines and Non-linear Models of Affine Spaces, *Math. Pannonica* **14** (2003), 113–127.