

The advantage of the geometric approach to linear model and its applications is known to many authors. In spite of that, it still remains to be rather unpopular in teaching statistics around the world and is almost missing in the Czech Republic. In this work, we use geometry of multidimensional vector spaces to derive some well-known properties of the linear model and to explain some of the most familiar statistical methods to show usefulness of this approach, also known as "free-coordinate". Besides, historical background including selected results of R. A. Fisher is briefly discussed; it follows that the geometry approach to linear model is justifiable from the historical point of view, too.