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LINEAR BUNDLES WITHIN THE FRAMEWORK OF COINCIDENCE OF CIRCLE AND ELLIPSE

Compositions represented by geometrical graphic models of circular and elliptical shapes enjoy wide application in architectural and interior design. The research of variations of coincidences of circles and ellipses is a relevant subject of exploration. In the paper, the authors analyze some of the multiplicity of coincidences, and an example of their practical implementation (a church dome model). The section of an object is “amalgamated” into the architectural concept of the structure, the relief and theological ideas.

Geometric interlinks, compositions and figurations of interconnected diameters, circular and elliptical arcs, their tangency, incidences and interspaces have always been of interest to researchers; they have triggered the search for harmonious and rational solutions in civil engineering and architecture. Advancements in theoretical geometrography and its software applications facilitate new solutions.

Key words: circle and ellipse coincidence, orthodiameters, concentric circles, chord, golden proportion, geometrography, ellipse, squaring of circle.

References

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