Institut für Geometrie

Vortrag

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Generalized Rose-surfaces

SONJA GORJANC
(Faculty of Civil Engineering, University of Zagreb)

Following earlier work, we introduce new constructions of rose surfaces based on normal curve congruences of circles. We derive parametric equations (which enable their visualization in Mathematica) and investigate some of their properties. In particular we derive a family of algebraic surfaces of order 3n passing through the absolute conic, which include parabolic cyclides and Dupin’s cyclides. Many examples of rose surfaces exhibit attractive shapes, a small number of high singularities.


O. Röschel