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Non-linearly parameterized pencils of conics in even projective planes

In a Desarguesian projective plane, the set of conics through three or four points form a linearly parameterized net of pencil of conics, respectively. In an odd plane, the set of conics tangent to three lines forms a dual net which might not be linearly parameterized. The subset of these through a fixed point is a non-linearly parameterized pencil. In even planes all the tangent lines of a conic intersect in a common point, the nucleus, so set of conics tangent to three lines is equivalent to the set of conics which share a common nucleus and the same construction is not possible. We show that there does exist non-linearly parameterized pencils of conics in even planes and explore their structure and combinatorics. We demonstrate a connection between these pencils and the construction of mutually orthogonal affine planes and covering arrays.