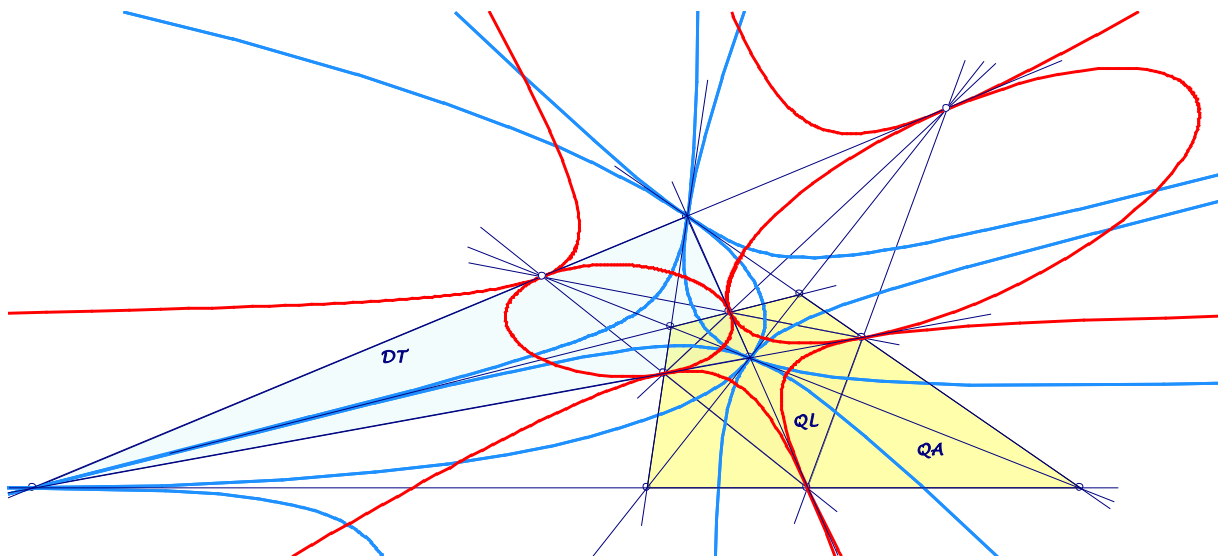


Background for these notes is:
Chris van Tienhoven: Encyclopedia of Quadri-Figures
<http://www.chrisvantienhoven.nl/>

Dual Conics in the QA/QL-constellation

In addition to EQF-Note 2016-09-22 here are described 2×4 dual conics in the QA/QL-constellation, using point and line isoconjugations:

- (1) Conics inscribed the diagonal triangle DT and circumscribed a QL -triangle.
- (2) Conics circumscribed the diagonal triangle DT and inscribed a QA -triangle.



Starting with a quadrangle QA and its diagonal triangle DT , the DT -trilinear polars of the QA -vertices give the dual QL with the same diagonal triangle.

- The DT -trilinear polars of points on a QL -line envelope a conic of type (1).
- The line isoconjugation QL - Tf_2 for the line pencil of a QA -vertex gives a conic of type (1).
- The isoconjugate of a QL -line wrt an isoconjugation for the remaining QL -trilateral with fixed point in the corresponding QA -vertex is a conic of type (1).

The dual interpretation:

- The DT -trilinear poles of lines through a QA -vertex give a conic of type (2).

- The isoconjugation $QA-Tf2$ for a QL -line gives a conic of type (2).
- The line isoconjugate of the line pencil of a QA -vertex wrt a line isoconjugation for the remaining QA -triangle with fixed line in the corresponding QL -line gives a conic of type (2).

Conclusion:

- The conics of type (1) are the duals of the conics of type (2).

Additional remarks:

- The centers of the four conics of type (1) lie on a DT -circumscribed conic through $QL-P8$, $QL-P13$, $QL-P24$.
- The centers of the four conics of type (1) are the duals of parallels to the QL -lines two thirds distance to the corresponding QA -vertex.
- The centers of the four conics of type (2) are the duals of parallels to the QL -lines one third distance to the corresponding QA -vertex.

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