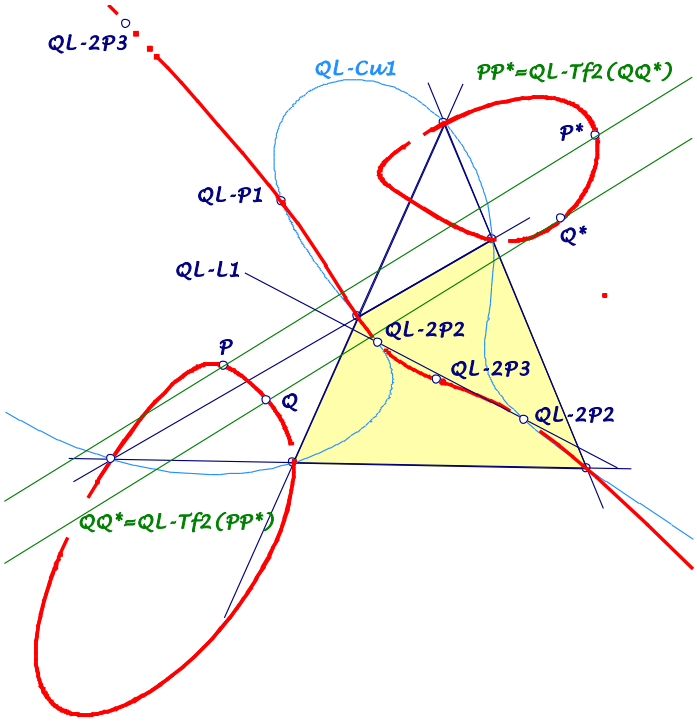
EQF-Note 2015-09-24

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

QL-Quintic

The cubic QL-Cu1 is the locus of QL-Tf1-partners X, X, with the property: XX* orthogonal QL-Tf2(XX*) (see #1297). What about the locus of QL-Tf1-partners with the property: XX* parallel QL-Tf2(XX*)?*

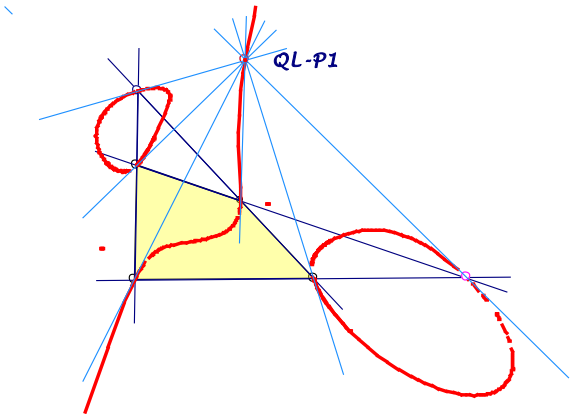


- **The locus of *QL-Tf1*-partners *X*, *X**-with *XX** parallel *QL-Tf2(XX*)* is a quintic, locus of the *QL-Tf1*-partners on the *QL-Tf2*-images of the asymptotes of *QL*-inscribed conics.**

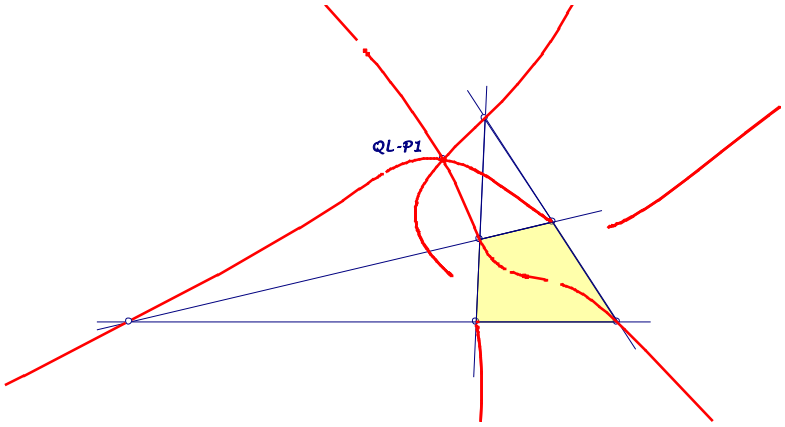
- **The quintic is *QL-Tf1*-invariant** (evident)**.**

- **Following points lie on the quintic:**
  … the 6 intersections of the *QL*-lines,
  … the Miquel point *QL-P1*,
  … the intersections *QL-2P2* of *QL-L1* and *QL-Cu1*,
  … the fixed points *QL-2P3* of *QL-Tf1*,
  … the *QL-Tf1*-partners on the *QL*-lines,
  … the *QL-Tf1*-partners on the sidelines of the anticomplement triangle of *QL-Tr1*.

- **The tangents at the quintic in the 6 intersections of *QL*-lines intersect in the Miquel point *QL-P1*.**



Final remark: *QL-P1* can be a triple point of the quintic.



Eckart Schmidt
http://eckartschmidt.de
eckart_schmidt@t-online.de