# Real inflection points of real linear series on real (hyper)elliptic curves

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According to Plücker's formula, the total inflection of a linear series $(L, V)$ on a complex algebraic curve $C$ is fixed by numerical data, namely the degree of $L$ and the dimension of $V$. Equipping $C$ and $(L, V)$ with compatible real structures, it is more interesting to ask about the total *real* inflection of $(L, V)$. The topology of the real inflectionary locus depends in a nontrivial way on the topology of the real locus of $C$. We study this dependency when $C$ is hyperelliptic and $L$ is a complete series. In [1], we use a nonarchimedean degeneration to relate the (real) inflection of complete series to the (real) inflection of incomplete series on elliptic curves; in [2], we analyze the real loci of Wronskians along an elliptic curve, and formulate some conjectural quantitative estimates.

## References

[1] I. Biswas, E. Cotterill, and C. Garay López, *Real inflection points of real hyperelliptic curves*, `arXiv:1708.08400`.

[2] E. Cotterill and C. Garay López, *Real inflection points of real linear series on an elliptic curve*, `arXiv:1804.06524`.