On the Designation “Gauss–Euler Algorithm”

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Richard P. Brent objected to the designation *Gauss–Euler algorithm* in his *Letter to the Editor*, *Notices of the American Mathematical Society*, **60**(1), January 2013, p. 7.
https://www.ams.org/notices/201301/rnoti-p7.pdf

His objection turns on the prominence of the names *Gauss* and *Euler* individually. It overlooks the distinctive feature of the designation itself: **Gauss–Euler** is a unique coupling, not a juxtaposition of two celebrated names. The mathematical significance resides in the combination, not in its components considered separately.

The uniqueness of the compound designation identifies the mathematical synthesis underlying the exact computation of π. The breadth of the individual contributions of Gauss and Euler elsewhere in mathematics has no bearing on the specificity of their pairing here.

His argument based on the absence of automated computation in the time of Gauss and Euler is likewise irrelevant. Computers execute mathematics; they do not determine its origin.

The conjugate formulation reinforces this conclusion by exhibiting the same mathematical object in different variables. It confirms that the essential object is the Gauss–Euler synthesis itself rather than any particular realization.