

**ZMATH 1995a.00367**

**Fitt, A.; Hoare, G.**

**The closed form integration of arbitrary functions.**

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Mit Hilfe des Liouvilleschen Satzes wird die Stammfunktion von Funktionen ermittelt.

This paper looks at the problem of anti-differentiation, i.e. integrating common functions and trying to find patterns instead of using a range of techniques such as substitution, separation, etc. The approach is via the theorem of Liouville, which is developed to give the integral of any combination of an algebraic and exponential function which is an elementary integral. This result, known for 130 years, is now arousing interest, with the availability of symbolic manipulation packages on computers.

*Classification:* I40

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