

**ZMATH 2010a.00433**

**Bringslid, Odd**

**The Xmath integration algorithm.**

J. Comput. Math. Sci. Teach. 28, No. 2, 113-122 (2009).

Summary: The projects Xmath (Bringslid & Canessa, 2002) and dMath (Bringslid, de la Villa, & Rodriguez, 2007) were supported by the European Commission in the so called Minerva Action (Xmath) and The Leonardo da Vinci programme (dMath). The Xmath eBook (Bringslid, 2006) includes algorithms into a wide range of undergraduate mathematical issues embedded in Mathematica (Wolfram Research, 2002) packages available on the web using the system webMathematica (Wolfram Research, 2002). The main purpose is to visualize mathematics in the same way as would a professor do it on the blackboard stating all intermediate steps and then presenting solutions being easily recognized by the undergraduate student which is not always the case using the Mathematica system directly. In this article the Xmath algorithm for solving indefinite integrals is presented.

*Classification:* I55 U55 R25

*Keywords:* integral calculus; visualization; computer algebra; internet