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Jim Wolper* (wolpjame@isu.edu), Idaho State University, Department of Mathematics and Statistics, 921 S. 8th Ave., Mail Stop 8085, Pocatello, ID 83209. *Distribution of Periods of Macbeath's Curve*. Preliminary report.

The automorphism group of Macbeath's Curve of genus 7 has the maximum size, making it an ongoing example of intense study. This talk applies a new tool, the distribution of the periods, to studying Macbeath's curve. While period distributions have been studied numerically, the periods of this curve are known exactly. Furthermore, the Jacobian is isogenous to a seven-fold product of an elliptic curve, leading to a different period distribution. How are these related? (Received September 13, 2016)