

1086-VB-2411      **Mitsuo Kobayashi\*** ([mkobayashi@csupomona.edu](mailto:mkobayashi@csupomona.edu)), Cal Poly Pomona, Department of Mathematics and Statistics, 3801 West Temple Avenue, Pomona, CA 91768. *A Dissection Proof of Leibniz's Series for  $\pi/4$ .*

Inspired by Lord Brouncker's discovery of his series for  $\ln 2$  by mapping rectangular areas below the curve  $1/x$ , Viggo Brun found a way to partition regions of the unit circle so that their areas correspond to terms of Leibniz's series for  $\pi/4$ . Brun's argument involves splitting the circle into triangular wedges and applying a limiting process. We show that usual techniques in calculus may be used to derive a result similar to Brun's. (Received September 25, 2012)