1146-11-83 **Lin Jiu***, Department of Mathematics and Statistics, Dalhousie University, 6316 Coburg Road, Halifax, NS B3h 4R2, Canada, and **Christophe Vignat**, Department of Mathematics, Tulane University, 6823 St. Charles Ave, New Orleans, LA 70118. *Random Walk Approaches to Identities on Higher-order Bernoulli and Euler Polynomials.*

We use random walks as an approach to obtain identities for higher-order Bernoulli and Euler polynomials. In particular, we study the cases of a 1-dimensional linear reflected Brownian motion and of a 3-dimensional Bessel process. By decomposing the successive hitting times of two, three, and four fixed levels of these random walks, we obtain non-trivial identities that involve higher-order Bernoulli and Euler polynomials. (Received January 09, 2019)