

1145-VB-1058 **Paul R. Bialek*** (pbialek@tiu.edu), 2065 Half Day Rd, Deerfield, IL 60015. *Euler's proof that every integer is the sum of four or fewer square fractions.*

In his paper entitled Proof of a theorem of Fermat that every number whether whole or fraction is the sum of four or fewer squares (E242 in the Eneström index), Euler uses quadratic residues to prove that every integer or fraction is the sum of four or fewer square fractions. We will present a translation from the Latin and summary of this previously untranslated paper. (Received September 18, 2018)