Livinus U Uko\* (luko@ggc.edu), School of Science and Technology, Georgia Gwinnett College, Lawrenceville, GA 30043. A student-friendly proof of the density of rationals.

Many students struggle with proof courses, especially during their first two years of college. This causes much frustration for students and instructors alike. One way of improving this situation is to develop effective teaching techniques, especially those based on the active learning model. However, this approach will not achieve much if the proofs presented in the classroom are perceived by the students as really difficult. We believe that research on more effective proof-teaching techniques should be accompanied and complemented by research on the development of simpler and more incisive proofs that are easier for students to understand.

In this talk, I will present a simple sequence of results leading to a simple proof of the density of rational numbers that I have used with some success to reduce stress levels in my recent real analysis classes. (Received September 20, 2016)