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**Juan Pablo Mejia Ramos\*** (jpmejia@math.rutgers.edu), 10 Seminary Place, New Brunswick, NJ 08904, and **Matthew Inglis**. *Undergraduate students' assessment of the persuasiveness of mathematical arguments: Beyond private and public senses of conviction.*

Several mathematics educators have suggested that there are two different ways in which mathematics undergraduate students proceed when assessing the persuasiveness of a mathematical argument: by evaluating the extent to which it is personally convincing, or by evaluating the extent to which it is publicly acceptable. In this presentation we use Toulmin's (1958) argumentation scheme to describe a more detailed classification of the different ways in which students may assess the persuasiveness of an argument. We suggest that there are (at least) five different ways in which such an evaluation may take place. This classification is illustrated with data from an interview study that tracked the development of students' argument evaluation behavior across the course of an undergraduate mathematics degree. (Received September 21, 2009)