

1135-01-1581 **Robert E. Bradley*** (bradley@adelphi.edu), Adelphi University, Department of Mathematics
& Computer Science, 1 South Ave., Garden City, NY 11530. *D'Alembert and the Case for Limits.*

Jean Le Rond d'Alembert (1717-1783) mastered the differential and integral calculus as it was practiced in Continental Europe during the first half of the 18th century and went on to introduce a number of important innovations of his own to the field. However, one of his most valuable and lasting contributions to the development of analysis was his role as an early champion of the limit concept, as opposed to the doctrine of infinitely small quantities, in providing “the true metaphysics of the differential calculus.” We consider d'Alembert's arguments for this approach to the foundations of calculus, as given in Diderot's *Encyclopédie* and in his other writings. (Received September 23, 2017)