

**Meeting:** 1003, Atlanta, Georgia, GOUVEA, MAA Invited Address

1003-A0-12            **Fernando Q. Gouvêa\***, Colby College, Department of Mathematics, Mayflower Hill 5836,  
Waterville, ME 04901. *What are  $p$ -adic numbers and what are they for?*

Many mathematicians, when they first learn about  $p$ -adic numbers, wonder what the point is: completing the rationals with respect to a different metric is kind of interesting, but doesn't seem very important. We will begin with an elementary introduction to the  $p$ -adic numbers, then explore a little bit of their history with the goal of explaining why and when they are useful. (Received April 01, 2004)