Meeting: 1002, Pittsburgh, Pennsylvania, SS 3A, Special Session on The History of Mathematics

1002-01-153 **Christopher Baltus*** (baltus@oswego.edu), Department of Mathematics, SUNY College at Oswego, Oswego, NY 13126. *The gap in Lambert's proof (1767) that pi is irrational.*

How serious are the deficiencies in Lambert's continued fraction proof? This is still an issue. [See Remmert (1991) versus Walliser (2000).] Lambert made use of comparison to geometric series to show convergence. But at a crucial step, the series comparison cannot support the conclusion. This gap will be pointed out, along with an elementary continued fraction theorem that does fill the gap. (Received September 13, 2004)